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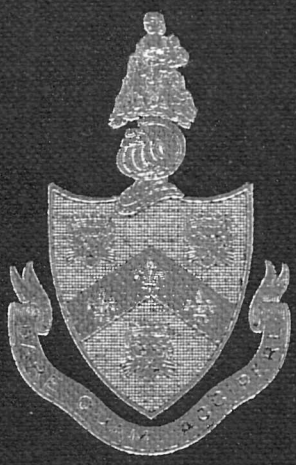

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GUY'S HOSPITAL GAZETTE.

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Passim.

ONCE more it is our fate to record the passing of the old year and the coming of the new, and we look with regret on the ending of the last concert of the Hospital Christmas. Once more the Hospital resumes its grim task of carrying on. The Christmas festivities have, of necessity, been changed to a great extent during the last two years, but still there is retained that inestimable atmosphere of cheerfulness and goodwill on all sides. Perhaps this was seen more than ever in the Landon Tea in Out-Patients. Here to the tunes of a jazz band, and led for part of the time by the Niggers, seven hundred children yelled themselves hoarse for what seemed like hours on end. Even the proverbial equanimity of the London policeman was disturbed in his exhaustive efforts to restore law and order. Finally he did the other thing and gave it up!

We cannot hope, in a few lines, to describe the wonderful transformation which had been performed in the various wards. The decorations, if anything, excelled all previous efforts; and great praise is due to the sisters and nurses who started, weeks beforehand, their preparations for the great day, and crowned their efforts with such success.

The Niggers appeared once more on Christmas morning to the great delight of all, and were eagerly followed round by young and old. An account of their wanderings, together with details of the ward concerts, are published in the ensuing pages.

Only one shadow fell upon the joy of our celebrations—the death of our latest *contemporary* (very!)—"The Guy's Hospital Gazeatt." We welcomed with delight the ingenuity of its birth, and when next we burst forth in joy from the Counting House, all radiating with amiable warmth, we have resolved to lead off Mr. B. I. De Ad into the highways and the byways of the Borough Hospices and persuade him to revive the spirit of the dead.

FOR some little time rumour has been current to the effect that there would be no Residents' Theatricals this year. These were revived last year for the first time since the war and that such an old tradition, and so popular an event, should again be permitted to lapse into oblivion would be nothing less than a tragedy. It was thus with great pleasure that we heard, from an authoritative source, that again Dame Rumour was wrong in her allegations. There is to be a Residents' Play. Little more is at present known of it, beyond the fact that it will be held early in February. Its title and

author, though we may have our suspicions, are at present veiled in obscurity (luckily perhaps for the author!).

We offer our best wishes to the Residents in their venture, and feel sure that, with the aid of such scintillating local talent as was displayed at Christmas, the audience, and the victims, will be provided with a really enjoyable entertainment.

Who knows but that in a few days we may observe a worthy H.P. emerging from the College with muttering lips, and on his brow a troubled mien. Or more—we may yet hear the H. S. as he ruminates on an appendix in the surgery :—

"To cut, or not to cut; that is the question:
Whether 'tis better in the end to suffer
The pains and colics of an inflamed appendage,
Or to dive into a sea of adhesions
And by excision end them? To die: to sleep;
No more—Alas, poor Yorick—"

It is with great pleasure that we announce a gift of £2,600, to be paid in instalments of £400 over a period of six and a half years, which has been made by the directors of Ashton and Parsons, Limited, to the President and Governors of the Hospital.

As will be seen on page 6, the money will be used in the establishment of one or more Parsons Fellowships or Studentships. The holders of these will, in conjunction with other workers, undertake the investigation and elucidation of the origin, progress, treatment, and cure of Diabetes Mellitus, together with other related disorders of metabolism.

Much has appeared in the lay press recently concerning "insulin," a supposed cure for diabetes, recently perfected by Banting and Best at Toronto University. The Parsons Fellowship Fund opens out wide opportunities for adequate research into the preparation and use of this new substance.

We feel it is impossible for us to express adequately our admiration of this generous action taken by the directors of Messrs. Ashton and Parsons. Immense as are the strides made in medicine during recent years, we are far from nearing our Utopian ideal. In the world as at present constituted idealism must needs go hand in hand with materialism, and the economic aspect of medical research is a pressing one.

We can only hope that there are others who will follow this splendid example by substantially aiding the furtherance of such research.

Our heartiest congratulations to the Rugby XV. on their return from the first, but we hope not the last, visit to France, where on Christmas Day they drew against the Stade Français. The warm tributes paid by the French sporting press once more enhances the reputation of their really fine play. We can only express our great regret at not being actual spectators.

The *Auto*, calling attention to the masterly way in which the Guy's three-quarters handled the ball, declares that the team's reputation for open play was fully maintained. "At first the Parisians could make nothing of the veritable conjuring tricks played by Albertijn and Van Schalkwijk, but little by little a defence was put up which the Guy's men could not pierce."

The *Petit Parisien* also states that the Guy's team deserved to win, and, for a long time, held the upper hand, attacking continually. "They furnished a remarkable game, all the players handling excellently, and introducing

all kinds of variations; only a certain slowness in execution often prevented the success of their attacks."

A short account of the tour and the games played appears on page 19. We hope to furnish further details in our next issue.

It was with great regret that we announced in our last issue the death of Herbert Lucas, an old Guy's man. Having qualified in 1865 M.R.C.S.Eng., and L.S.A., he left Guy's to go into partnership at Huntingdon with the late Mr. Forster. Many of the fine qualities which rendered him such popularity and trust as a physician he owed, no doubt, to his Quaker ancestry, coming from an old Quaker family at Hitchen. In addition to the work entailed by a large practice, he was, for fifty years, surgeon to the Hunts County Hospital and held many other local appointments. Ever a great lover of animals, he naturally took a keen interest in sport, being at one time secretary to the Cambridgeshire Hounds, and an active supporter of the Huntingdon Cricket Club. He leaves a widow, with one daughter and three sons.

Our heartiest congratulations to Dr. Maurice Coburn who obtained his M.D. in the examination held last month, and to Mr. P. G. McEvedy, F.R.C.S., who was recently appointed to the Ancoats Hospital at Manchester.

Change of Address.

G. L. Cutts, M.R.C.S., L.R.C.P., L.D.S., Queen's Hospital, Sidcup.

W. Burridge, Lucknow, India.

C. H. Laver, The Red House, India.

It is Rumoured in the Maze Pond—

THAT two dozen tightly fitting bathing costumes were recently ordered for the Out-Patient Staff!

(Tut! Tut! At this time of the year too! We always wondered whence the Serpentine Club drew its members for the Christmas Day revel in the brine.)

THAT the Acting Sergeant Major is suffering from amnesia. It is quite a time since last we heard his voice.

THAT it is time someone challenged the Steward firm for the Tug-of-War Cup.

THAT Queen indulged in quite a speculative mascot for Christmas.

THAT a certain registrar is extremely keen on the restoration of the telephone in the R.S.O.'s room.

THAT a well-known figure in College cirles recently succeeded in obtaining a hot bath at 2 p.m. He is reported to be progressing favourably.

THAT another blade of grass has been discovered in the Park.

THAT another tree will shortly be removed to let the aforementioned herbage grow.

THAT the precedent has now been set, when defeated in a rag, of retiring *according to plan*. (We seem to have heard those words before O Kings, where is your kick?)

Bermondsey and Rotherhithe War Memorial.

Photo by G. A. WALKER

In the latter part of the year 1921, the Bermondsey and Rotherhithe War Memorial Fund entered into communication with the Treasurer with a view to ascertaining whether the Governors would be prepared to undertake the maintenance and administration of a Children's Infirmary or Hospital in Rotherhithe, the funds available amounting to about £9,000, which had been subscribed for the purpose of a War Memorial in Bermondsey in addition to an actual monument, which had already been erected. erected.

The Governors pointed out that the money available would be inadequate to the construction, equipment and maintenance of a Children's Hospital in Rotherhithe, and suggested, as an alternative, to this Scheme, a proposal that the Bermondsey War Memorial Committee should hand over their funds to the Governors in trust for the maintenance of the Children's Ward at Guy's Hospital, as the Bermondsey and Rotherhithe War Memorial.

After negotiations this suggestion was accepted and approved by the Bermondsey and Rotherhithe Memorial Fund, and the Children's Ward will in future have an inscription upon it stating that it is the Bermondsey and Rotherhithe War Memorial Ward.

The terms of the Trust provide that the money is invested in Trust Funds. The interest accruing is to be used exclusively for the maintenance of the Children's Ward in Guy's Hospital, and the Ward is to be known as the Bermondsey and Rotherhithe War Memorial Ward for Children, and suitable tablets recording the gift and endowment are to be placed on the Ward and on the main gates in Maze Pond. The Hospital, as Trustees, shall provide for an Annual Function of Remembrance to be held at the War Memorial Monument, West Lane (Mill Pond Bridge), Rotherhithe, annnually on Armistice Day, November 11th, at eleven o'clock, to be followed by an invitation visit to the Ward to commemorate the foundation of the Charity and to perpetuate the honour of the Bermondsey and Rotherhithe Men who fell in the Great War 1914—18. The Mayor and Councillors of the Borough of Bermondsey are to be invited to attend the function.

The mosaic inscription on the Ward and the tablets are now being placed in position, and it is hoped that the Ward will be formally opened as the Bermondsey and Rotherhithe War Memorial, and the Funds handed over to the Governors in or about the third week in January.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—Now that the first half of the "Rugger" season is over, it is interesting to compare records of the leading clubs. Taking the London clubs, they run out as follows:—Bart.'s (12), 70·83 per cent.; Guy's (20), 60·0 per cent.; Blackheath (18), 52·7 per cent.; Harlequins (15), 46·4 per cent.; Richmond (14), 35·71 per cent.; and London Scottish (15) 20 per cent. These figures compare very poorly when put against the other clubs in England and Wales. For instance, Newport leads with (18) 94·4 per cent.; followed by Cardiff (20), 90·5 per cent.; Leicester (23) 78·26 per cent.; Gloucester (22), 77·27 per cent.; and Bristol (19), 71 per cent. Guy's figures do not compare well with last season's, at the same peroid, when their percentage was 85·3 per cent. The following figures show at a glance the position:—

	P.	W.	D.	L.	For	Ag.	%
End of December, 1921 ...	17	14	1	2	249	82	85·3
End of December, 1922 ...	20	11	2	7	210	140	60·0

The 1st XV. performances are not up to last year's standard, but before being too critical, one must remember that we have been very unlucky with regard to injuries. On November 18th, when the London Scots were met at Richmond, we had no les thsan eight reserves playing, and on other occasions following we were much below full strength. Let us hope that these men will be fit and ready for the fray again in the New Year.

Trusting these figures will interest you,—I am,
—Yours truly, ROY CAUVIN HOLLOWAY.

100, Elliscombe Road,
Old Charlton, S.E. 7.
2nd January, 1923.

Tabard House Dance.

"What do they know of England who only England know?" And what do they know of a Guy's Christmas who have never looked in at the Wardmaid's dance? It was preceded by a dinner carved by a real live French chef (engaged by the maids themselves at enormous expense). Sisters and Nurses did the waiting, to show the maids how waiting should be done, or to make them feel how much better they do it themselves—as the case may be.

The dance followed in the Recreation Room at Tabard House and for sheer crowded liveliness was a huge success.

Matron presented ten prizes for the best fancy dresses. The first prize for the prettiest dress went to a dream of lavender and cream which Regent Street could not have produced. It is whispered that it was brought back from the Rue de la Paix by the Rugger XV. the previous week. Be that as it may, it won the first prize. Other prizes were given to a jingling jester in red and orange, and a charming boy and girl in Dutch national costume reminiscent of the Lydia and Job Concert poster.

The "most original" prize went to a snowstorm effect with every flake of snow separately sewn on. Wonderful what an amount of work Miss Sheppard gets through, isn't it? The second prize for originality was awarded to a mélange of towels, handkerchiefs and other "hospitalities."

By way of emphasising the need of economy, two prizes were offered for the cheapest dresses. The first of these was won by the Lodge Maid at the Nurses' Home, who, with bitter sarcasm, had arrayed herself in a copy of the "News of the World." The second "miracle of cheapness" was a frock adorned with the contents of waste paper baskets.

Dick Whittington, complete with cat, took a prize for a very effective black "creation," and the "Booby" was Mrs. Scrubbs with a bucket and a dirty face. The winner of a pair of scissors, according to traditional custom, presented Matron with twopence (afterwards handed over to the Chapel Fund!) in order to preclude future complications.

The dances were varied with clog dancing and other accomplishments which made one feel that if the Niggers are stricken down with an epidemic any Christmas, Tabard House will rise to the occasion. Congratulations to Mrs. Sangster, Miss Bush and all concerned.

Publications Received.

St. Mary's Hospital Gazette, The Broadway, The Northerner (Armstrong College), University College Hospital Magazine, Queen's Medical Magazine (Birmingham), Nursing Times, Manchester Medical Magazine, The Caducens (Hong Kong University), Middlesex Hospital Journal, The Stethoscope (Bristol), Bratislava Medical Journal, The Serpent (Manchester), The Hospital Gazette, The Hospital and Health Review, The Gong (Nottingham), Journal of Bacteriology, Architectural Association Journal, Indian Medical Record, University College Magazine, Medical Journal of S. Africa, The Antiseptic (India), E. Merck's Jahresbericht (1921).

Guy's Hospital.

Regulations of the Parsons Fellowship Fund.

1. Inasmuch as the Directors of Ashton and Parsons Ltd., herinafter called the donors, have agreed by Covenant to pay to the President and Governors of the Hospital founded at the sole charges of Thomas Guy, Esquire, hereinafter called the said President and Governors, a sum of £200 half-yearly for 6½ years after deducting income tax, the first payment of £150 (i.e. £200 less tax) to be made on January 1st, 1923, the following regulations have been drawn up by the said President and Governors with reference to the payments.

2. The payments made by the donors shall form a fund which shall be used in the Medical Investigation Department of Guy's Hospital under the control of the Director of the Department for the purpose of investigating and elucidating the origin, progress, treatment and cure of diabetes mellitus and other related disorders of metabolism.

3. At least £350, less tax deducted, shall be used each year for the endowment of one or more Fellowships or Studentships, as determined by the Clinical Research Committee, to be called the Parsons Fellowships or Studentships.

4. The Treasurer of the Hospital acting on behalf of the said President and Governors shall appoint the Fellows or Students on the recommendation of the Clinical Research Committee. The Fellows or Students shall hold office during the pleasure of the said Treasurer for a period of one or two years in the first place, being then eligible for reappointment from year to year. Promotion to the Visiting Staff of the Hospital shall not disqualify the Fellow or Student from holding or obtaining the appointment.

5. The Parsons Fellows and Students shall work in the Medical Investigation Department under the direction and control of the Director. They shall give as much time to their work as the Clinical Research Committee shall prescribe, subject to which condition they may hold or be appointed to any part time appointment either in the Hospital or Medical School or elsewhere.

6. The Parsons Fellows or Students may be suspended or removed from their appointments by the Treasurer, should the Director and a majority of the Clinical Research Committee be satisfied that they are not performing their duties in a satisfactory manner.

7. The Clinical Research Committee shall exercise a general supervision over the work of the Parsons Fellows and Students working in the Medical Investigation Department.

8. The Treasurer of the Hospital shall, upon the advice of the Clinical Research Committee, give all proper facilities for the Fellows and Students to work in the Wards and Out-Patient Departments of the Hospital and in any or all of the Laboratories of the Hospital or Medical School.

9. In the event of any vacancy occurring in the Fellowship or Studentship a new appointment shall be made within three months, if there is a suitable candidate forthcoming.

10. A sum of £50 a year (less tax deducted) may be used on the recommendation of the Clinical Research Committee, to form a Parsons Research Fund for the purchase of apparatus and material, or to pay for assistance, or for the publication of collected papers or a monograph, in connection with the work on diabetes and related disorders of metabolism. Any unexpected balance, or the whole sum, if the expenses are defrayed from other sources, may be used to supplement the stipends of the Fellows or Students or to provide honoraria for other workers, whether medically qualified or not, who may be working or wish to work on diabetes mellitus and related disorders of metabolism in the Medical Investigation Department, or to make payments to persons who may be willing to offer themselves for systematic clinical observations.

11. The holder of a Parsons Fellowship or Studentship shall indicate the fact that he holds such Fellowship or Studentship when publishing any work carried out during the tenure of the Fellowship or Studentship by adding after his name "Parsons Fellow (or Student as the case may be) at Guy's Hospital." The Parsons Fellow or Student (or the Hospital or the Medical School acting on his behalf) will be at liberty to claim repayment of the deducted tax from the Inland Revenue Authorities to supplement his income from the fund on receipt of the necessary certificates from the donors. Repayment of the tax on behalf of the Parsons Research Fund may also be claimed.

12. If the Parsons Research Fund has been used to defray expenses of any research in the Department, such fact shall also be indicated when the research is published.

13. The Court of Committees, with the approval and consent of the donors may, upon the unanimous recommendation of the Clinical Research Committee, or so many of them as may be present at a Meeting specially called for the purpose by not less than 14 days' notice, alter or add to any of the conditions of this scheme, or any amended scheme by which the Fellowship shall be regulated, in such manner as shall in their opinion best carry out the wishes of the donors in promoting the objects for which the Fellowship was founded.

Notes upon Kidney Cases met with in the General Surgical Wards.

FROM TWO CLINICAL LECTURES BY SIR ALFRED FRIPP.

CHARACTERISTICS OF ABDOMINAL SWELLINGS FORMED BY THE KIDNEY—

1. Reniform.
2. Tendency to enlarge forwards—note the value of bi-manual palpation in investigating abdominal cases.
3. Moves with respiration, unless fixed by peri-renal adhesions or by extension of growth.
4. Can be separated from liver by palpation or percussion, or both.
5. Colon resonance is pushed up and forwards.
6. Consistence very variable.

DIAGNOSIS OF KIDNEY SWELLINGS from those formed in the—1, Liver; 2, Spleen; 3, Ovary; 4, Supra-renal; 5, Colon; 6, Peri-renal tissue.

Diagnosis often aided by X-rays, and especially by pyelography.

Cysts of the Kidney.

(excluding hydronephrosis which is a cyst of the pelvis, and pyonephrosis) are described under six categories—

1. Multiple and small in chronic nephritis.
2. Dermoid—less than ten have been recorded.
3. Solitary or serous—usually bulge into hilum (but I recently had a case bulging from the lower pole, and the size of a tangerine orange). It is said that under 50 have been recorded.
4. Hydatid—quite rare in Europe, but common in Iceland, Australia, Argentina.
5. Congenital polycystic disease in infants.
6. Polycystic disease appearing in adults, cannot be differentiated pathologically from 5. Both result in the kidney substance being replaced by a congeries of cysts from the size of seeds to large cherries, giving the appearance on section of a coarse sponge.

Theories as to origin of Polycystic disease—A. Congenital. B. Inflammatory. C. Neoplastic.

The disease is fairly common, and the presence in the wards of two cases of the adult variety at the present time prompted this lecture. Both are women and this is true to type, for it is commoner than in men.

Practically always bi-lateral. Contents vary. Little, if any, of the constituents of urine, and may be hæmorrhagic.

There is said to be some degree of family inheritance. 18 per cent said to present cysts of liver also.

Symptoms—

1. For a long time absent.
2. Then a period of tumour, or tumours (for it practically always becomes bi-lateral) without symptoms.
3. Later still the abnormalities in analysis of urine and in cardio-vascular system which you have learnt to associate with chronic nephritis become marked, and drag the patient down as cysts more and more completely replace, and by pressure efface, normal renal tissue.

Treatment useless, but if in doubt explore to decide nature of the tumour.

Nephroptosis

is term applied to "dropped kidney" or abnormal mobility (Note that normal kidney, like lymph glands, is seldom palpable).

Note also that all kidneys are moveable in the sense that they move with respiration, except such as have become fixed by peri-renal inflammatory adhesions (*e.g.*, after operation) or by growth.

Which is the best posture for examining patient?

1. Patient supine, Surgeon sitting on side of bed and facing.
2. Surgeon sitting or kneeling by side of supine patient.
3. Patient in knee-elbow position.

"*Floating Kidney.*"—This term should be reserved for those cases of congenital abnormality of peritoneal reflexions constituting mesonephron. Very rare indeed.

Glenard says one in six women have right kidney unduly moveable. (It is, therefore, so common that it may almost be said to be the

normal condition under certain physical predisposing causes, especially in multiparæ with long iliocostal space and poor musculature.) And that this is six times commoner than in men; that one case in twelve is bi-lateral; that there are 12 moveable right kidneys to one on the left.

Three degrees of mobility commonly recognised—

1. Kidney clearly palpable on inspiration.
2. Examining fingers can grasp the upper pole and keep the organ displaced even at completion of expiration.
3. Kidney can be moved freely to other parts of the abdomen.

Causes. Mesonephron and, at least now-a-days, tight-lacing are myths.

1. Loss of tone from repeated stretching of abdominal muscles.
2. Loss of peri-renal fat.
3. Jerks, sprains, heavy work.

Symptoms.—Note three points—

1. Often absent altogether (as in cysts).
2. Or present only when in ill-health, and this probably explains cure by truss support.
3. Little relation to degree of mobility.

A. Pain.—

1. Local aching, dragging.
2. Referred down branches of lumbar plexus.
3. Colic attacks—sometimes called "renal crises," due probably to kinking or torsion of renal vein or ureter, and resulting congestion.

B. Central nervous—

1. Neurasthenic.
2. Unreasoning melancholy—probably Mrs. Gummidge in David Copperfield was an instance.
3. Insanity—It has been claimed that cure has resulted from nephropexy.

C. Kidney may be tender and it may be large, especially when loose enough to permit such twisting as will cause any degree of obstruction of renal vein or ureter.

Pathology—possible changes induced—

1. Torsion or kinking of vessels or ureter.
2. Hydronephrosis with perhaps pyelitis.
3. Hepatic flexure, sympathetic plexus, and even duodenum are said to be prejudicially influenced by traction.

Treatment.—Very important because it is more easy to do harm than good, thus—

1. To declare the diagnosis without at the same time explaining how common and frequently harmless the condition is has often frightened the patient and made her introspective or worse.
2. Rather encourage, try to fatten her, and order the support which only a good metal spring truss can give. Belts I believe to be useless.
3. Nephropexy scarcely ever necessary except when there are renal crises, and very undesirable unless necessary.

Various techniques of Nephropexy but essentials always the same, namely—

1. Remove areolar tissue so that adhesions may take its place.
2. Raise strips of fibrous capsule from posterior surface and attach them either over the last rib or out into the muscles to act as a sling.

Calculus

Nucleus, body, crust.

Note 6 points—

1. Essentials for formation are crystals and colloid cement (mucin).
2. Newborn babies pass many nuclei formed of urate of ammonia.
3. 50 per cent. of cases are bi-lateral later
4. 50 per cent. present changes in the other kidney.
5. There appears to be some hereditary factor.
6. Also there appears to be a geographical one—though distribution is very irregular.

Additional Changes induced in affected kidney

1. Nephritis—some degree is probably always added.
2. Perinephritis—both early, and, later—suppurative perhaps.
3. Pyelitis.

4. Hydronephrosis—from ball-valve action.
5. Pyonephrosis—infection arriving by blood stream or ascending from bladder.
6. Malignant disease—from irritation by stone (as in gall-bladder).

Changes in other Kidney—

Compensatory hypertrophy.

Interstitial nephritis.

Calculus.

Ascending pyelonephrosis.

Varieties of Stone—

1. Small, smooth, round, likely to act as ball-valve.
2. Small, sharp, likely to scratch and cause hæmaturia, especially the oxalates.
3. Large, fixed, likely to cause tumour and pyuria.
4. Multiple in many cases.
5. Density varies, so X-rays may miss some.
6. Composition—uric acid, oxalates, phosphates, cystine. Except the latter, which is yellow or even green and "waxy," they are all white unless stained by blood pigments.

Signs and Symptoms may be absent, and depend much upon the variety.

1. Urine examination—
   a. Hæmaturia—smoky or red or clots.
   b. Crystals.
   c. Casts.
2. Pain—
   a. Lumbar dull ache.
   b. Radiating down branch of lumbar plexus, especially genito-crural.
   c. Colic attacks.
3. Tenderness to blows and jars.
4. Bladder irritability, frequency, relieved by rest in bed (which is not usually the case in other causes).
5. Radiography (drawbacks—thick abdomen, scybalous masses, calcareous glands, phleboliths). Useful only if positive, negative may cause refusal of operation, and justifies or dictates delay as long as there is doubt as to position of stone.

   Density varies with composition.

   Multiple stones.
6. Cystoscopy.

   Ureteric catheterisation.

   Segregation only depended on nowadays when collected from ureteric catheters.

Complications are due to either—

1. Migration;
2. Obstruction; or
3. Infection.

Diagnosis. In no less than one out of every five under suspicion no stone is found The explanation is usually afforded by one of the following 6 conditions—

1. Some other lesion of the kidney.
2. The cause is in the lower urinary track.
3. Or in the appendix.
4. Or other abdominal organ.
5. Gastric crises.
6. Malingering, especially during the war, but we had a case lately in a nurse from another hospital.

Prognosis. Don't forget that one in five suspects have no stone; that the other kidney may be affected as well; that only one in three die of it; and that the wrong side may be diagnosed.

Treatment—

1. Prophylactic or medical—diet and drink; Spa treatment.
2. Emergencies—colic calling for morphia; hæmorrhage, seldom serious and usually subsiding with mere rest in bed; anuria.
3. Operative—nephrotomy; pyelotomy; nephrectomy.

Hydronephrosis

Cause, intermittent obstruction (sudden and complete causes arrest of secretion and later atrophy).

Causes—

In many of the largest specimens it is difficult to discover any cause.

A. At or near kidney—

1. Curving and kinking of ureter; resulting permanent changes in pelvis and valve formation at entrance to ureter;

   Torsion, as in floating or very moveable kidney, must be rare.

2. Intermittent blocking usually by stone.
3. Bands outside ureter, especially an aberrant artery (denied by some).

B. In course of ureter—
1. Commonly a calculus lodged there.
2. Rarely stricture, *e.g.*, after operation.
3. Pressure of pelvic growth or inflammation.

C. Rarely in bladder, *e.g.*, growth, especially prostate. Still more rarely stricture in urethra, or congenital occlusion.

Effects upon—

1. Parenchyma, which is compressed, stretched and later atrophied.
2. Pelvis, which is dilated and thinned, and becomes valved at entrance to ureter.
3. Contents—watery; only 1 per cent. urea plus albumen, plus mucus, may become infected, or haemorrhagic, as in any cyst.

Symptoms—

An abdominal tumour of any size from orange to adult head—conforming to points mentioned above as characteristic of kidney swelling, but usually intermittent.

Attacks simulating calculus, but suddenly relieved in early stages, often with corresponding increased urination.

It has been pointed out by Bland-Sutton that profuse diuresis following upon the sudden disappearance of an abdominal swelling is as characteristic of rupture of an ovarian cyst as it is of an intermitting hydronephrosis.

Diagnosis—

1. From other causes of colic.
2. From other causes of cyst.
3. From other causes of tumour.

Often depends upon intermittent subsidence and upon cystoscopy and pyelography.

Prognosis depends upon—

1. The cause, whether easily removed.
2. Extent of damage to cortex.
3. Condition of contents—whether septic.
4. Condition of walls, may rupture.
5. Condition of other kidney
6. Size.

Treatment—

A. Tapping—not employed so often nowadays as when operations were more dangerous, but still occasionally useful as a preliminary or palliative measure, or even for diagnostic purposes.

B. Tapping and drainage, when the patient is too ill for big operation.

C. Exploring and dealing with the cause. Thus :—

(a) Nephropexy—to prevent recurrence of kinking.

(b) Ureteroplasty—to deal with valving or stricture.

(c) Drainage—temporary or permanent—of pelvis=pyelostomy ; through cortex= nephrostomy.

(d) Nephrectomy—primary.
secondary more difficult.

Tubercle of Kidney.

Primary—probably never.

Secondary—to genito-urinary lower down, or to lung, or to some other organ.

Tubercle Bacillus may arrive—

a. by ascending—now thought to be infinitely rare though experimentally possible.

b. by blood—probably most frequent.

c. by lymphatics—even retrograde from the mediastinal glands.

Commonest at ages 20 to 40.

Does trauma play any part? Probably no.

Probably always uni-lateral for a time; very important point, as this means that there is always a stage when, if discovered, nephrectomy would effect a cure.

Pathological types—

a. Ulcero-cavernous without increase in size, starting on apex of a pyramid, so no tumour palpable.

b. Caseous or massive.

Notice—

1. That pelvis soon, and later the ureter, becomes infected by direct extension.
2. Tendency to peri-renal adhesions with fixation and spread.
3. Much depends upon whether second kidney is yet attacked (spread by bloodstream).

Signs and Symptoms (grouped as under Calculus)—

1. Urine analysis—
   (a). Poly-uria of that side is probably the earliest symptoms of all.
   (b). Hæmaturia very variable and occasionally profuse, often in early stage without T.B. being demonstrable.
   (c). Albuminuria.
   (d). Pyuria with T.B. demonstrable.
2. Pain—often absent (but renal or ureteric colic from temporary blocking is frequent).
3. Tenderness to pressure, which may extend down course of ureter and even be detected per rectum or per vaginam.

   As already stated, tumour is often absent and the other kidney may be hypertrophied, with or without infection.
4. Bladder irritability very frequently brings the case as one simulating cystitis.
5. Radiography. Shadow may show an enlarged, opaque kidney with such defined areas as to suggest calculi.
6. Cystoscope—bladder may be infected, even ulcerated, but more often normal except at corresponding ureteric orifice, which shows early pouting and swelling. Catheterisation of ureters will segregate urine from the two sides and permit pyelography.

Prognosis difficult and uncertain, so much depends upon the stage and upon personal resistance, but probably 4 to 7 years is limit of life unless cure effected, and much less if mixed infection occurs, *e.g.*, following bladder manipulation. Death caused by spread to bladder, or to second kidney, or other organ, or by mixed infection being super-imposed.

Clinical types vary much, and, as in other forms of tuberculous disease, there are ups and downs.

a. Cystitis type with pyuria, T.B. in urine, but very likely no tumour palpable.

b. Tumour type with perhaps hydronephrosis and very likely no T.B.

c. Hæmaturia type.

Treatment—

1. Medicinal and climatic, as for tubercle of any other part; urotropine and lavage are useless unless there is a mixed infection.
2. Tuberculin, especially useful in children, because in them the second kidney is early involved, and therefore nephrectomy seldom indicated; and also useful for tubercle in bladder after nephrectomy.
3. Operative—
   a. Partial nephrectomy no longer used.
   b. Complete and early nephrectomy as soon as diagnosis established and other kidney proved free. Difficulty depends upon whether peri-renal adhesions have occurred. Better done through oblique lumbar wound half-an-inch below last rib (which seldom if ever has to be interfered with). This can conveniently be prolonged forwards to effect ureterectomy, and so to avoid cutting across ureter if this is found to be infected.

Choice between 1, 2, and 3 depends upon—

a. Is there tuberculous cystitis?

b. Is second kidney present, and if so, is it healthy or not?

c. Is there tubercle elsewhere in the patient?

Remote prognosis after nephrectomy extremely good if two years pass without recurrence elsewhere. Mortality from nephrectomy said to have fallen from 90 per cent. in 1885 to 7 per cent. in 1908.

Tumours of the Kidney.

Five per cent. at most are innocent, and even these few are practically always quite small in size. They include Adenoma, Fibroma, Lipoma, and Myoma.

So that a kidney tumour large enough to be obvious is practically always malignant, and calls for nephrectomy if possible, either by the abdominal route, or through the prolonged lumbar incision. Even if this is safely accomplished it is said that recurrence occurs in 60 per cent .within a year, almost always in the local glands, for metastatic deposits are curiously rare, except in the bones.

These malignant growths in the kidney usually manifest themselves before the age of 5 or after 40.

A recent table indicates that 50 per cent. are hypernephromas, *i.e.*, embryonic inclusions of suprarenal tissue within the fibrous capsule, and the other 50 per cent. are about equally divided between Carcinoma, Sarcoma and Mixed embryonic tumour.

Sarcoma occurs especially in infants, originating in the connective tissue of the hilum, and is often bi-lateral, and often huge. Note the curious tendency of sarcoma in early life to attack both of the various paired viscera. It is met with again, though rarely, in adults, especially after 40, but there is a curious difference from the infant variety in that the origin is from the connective tissue of the capsule. Hypernephroma has a tendency to invade the renal vein, but not to extend down the ureter. Carcinoma increases in frequency after the fiftieth year and is usually unilateral (even when it attacks a horse-shoe kidney).

Symptoms accompanying malignant tumours—

Hæmaturia.

Pain.

Pressure effects either local, *e.g.*, varicocele, or general resulting in hypertrophy of left ventricle, with high blood pressure,

Wasting, and even

Fever.

X-rays will demonstrate the tumour, and also the metastatic deposits, if present. Average *prognosis* 3½ years from first symptoms. *Diagnosis* from tumours of Supra-renal gland, Liver and Gall-bladder, Spleen, Colon, Omentum.

Explore if in doubt.

Time precludes me from dealing with the Congenital abnormalities, and with Injuries, with Peri-nephritis, with Surgical nephritis, with renal Fistulæ, with Decapsulation (an operation not infrequently called for by the physician nowadays in selected cases of Bright's disease, usually easy of performance, so that both sides are done at one sitting, and there have been some very promising results) and with the Infective processes, for instance, B.C.C. pyelitis, which often come into the surgical wards simulating one or other of the conditions we have been dealing with, though really appropriate treatment is medical rather than surgical; and finally that interesting class of Perinephric abscess, which proves on culture to be staphylococcal.

There are, however, three other forms of growth which must be briefly alluded to and borne in mind whenever a renal case is being investigated :—

Tumours of Renal Pelvis and Ureter.—These are rare, but Papilloma and, more rarely Carcinoma, cause intermittent hæmaturia, with perhaps tumour, and perhaps the shedding of fragments in the urine.

Peri-renal Tumours—

Solid, may become enormous, include Lipoma and its varieties (which oddly enough like moveable kidney are nearly always on the right), Sarcoma and mixed remains of Wolffian body.

Cystic—uni- or multi-locular remains of Wolffian body.

Tumours of Supra-renal, or HYPERNEPHROMATA, reproducing the cortex of the gland.

There is usually arrest of mental development, precocious puberty, emaciation, possibly uni-lateral hypertrophy, and bronzing, but the last is rarer than in tuberculous destruction.

There may be pain referred along the nerves; there may be metastatic deposits in the bones.

The diagnosis from renal tumours may be helped by pyelography. Hæmaturia is absent, and in its early stages the peri-renal tumour lies high and is very moveable.

Prognosis extremely bad; said to average under a year.

Papers by Guy's Men.

C. P. Symonds, M.D. Myasthenia Gravis.—*Clinical Journal* li., p. 604.

F. N. Doubleday, M.R.C.S., L.R.C.P., L.D.S. Dental Infections: Their Diagnosis and Treatment.—*The Medical World*, Vol. xvii., No. 7, 1922.

——. The Diagnosis and Treatment of the Different Types of Chronic Periodontis.—*Brit. Dent. Jour.*, December 1st, 1922.

Arthur F. Hurst, M.D., F.R.C.P. An address on the "Hypersthenic Gastric Diathesis" and the Pathology, Prophylaxis, and Treatment of Duodenal Ulcer.—*Lancet*, 1922, ii., *p.* 1369.

Christmas Concerts.

THE NIGGERS.

"And so we go on and on." In this chorus the Niggers were undoubtedly giving us their "To-day's Great Thought." In their indefatigable zeal and cheeriness they worthily upheld the traditions established by their predecessors. At 11.30 a.m. the President of the Residents (Mr. A. T. Rogers), his natural beauty enhanced by a magnificent and most successful costume, informed a shocked Hospital in a passionate *falsetto* that he did NOT know what Dr. Kendall did in the Eye Wards. At 7.30 p.m. the National Anthem concluded the day's "round" in Astley Cooper.

Between these hours the Troupe went "on and on" visiting every ward (except Babies', which is evidently considered not up to the intellectual level which the Niggers demand of their audience), and as usual reaching their high-water mark of noise and nonsense in Out-Patients. The scene here really *baffled description; even the usually imperturbable* police were impressed. One constable assured us that certain members of the Troupe (wild horses will not drag from us their names) had clearly missed their vocation and would astonish London "on the 'Alls."

We tried to discover in O.P. whether the Niggers or the children were enjoying themselves most. We gave it up. Probably the greatest hit was that scored by a gentleman in a top hat and tail coat who seemed to remind us of someone we have seen before. He carried a board inscribed with the mystic letters I.O.D. This board was responsible for one awful moment. A group of visitors asked their host what the letters meant and why they appeared to amuse us so much. We trembled with apprehension, fearing that the notorious and cold-blooded brutality of our Staff was on the verge of another exposure. But the reply saved the situation at once and we have not yet ceased to admire its tact. "Oh, that!" said the dresser consulted, "that's just a little joke of ours about Iodine." And the questioners, completely satisfied, turned to the charms of "Peggy O'Neill."

The Clinicals scored a well-deserved success. Scraping the floor of the Bright Hall with cutlasses and offering inexpensive murders and the satisfac-tion of a mess on the surgery floor, they are still busy with our dreams. Moreover, by providing "a troupe within a troupe" they greatly added to the variety of the programme.

Of the other turns the ones that got most applause, especially from the large element of children in each audience, were "Beaver," "Carbolic," and "Wiki Walla Walla oo bah Bay."

The costumes were fully up to last year's standard. We must congratulate the Nigger Parson on having become a Bishop. This is some compensation for the disappearance of the Cardinal. Perhaps no make-up quite rivalled last year's Bookie and Little Lord Fauntelroy, but the general impression of the *march-past* was as effective and amusing as ever. We frankly did not think the "patter" and the topical allusions as good as in past years. There is surely abundant material in twelve months of the life of Guy's to provide original copy of this kind throughout the afternoon. Perhaps if the Niggers had gone "on and on" up to midnight they might have given us more of the sort of thing we were listening for. Certainly in the last Ward or two Mr. Shaw experienced a series of brain-waves and was continually thinking of "a new one" which Massa Johnson's efforts altogether failed to suppress.

The Niggers visited Lambeth Infirmary during the week.

THE CHILDREN'S WARD.

If there is anybody in the Hospital who is not sure how to answer the conundrum, "Are fairies real?" he could have had very definite and delightful proof of their existence by paying a visit to the Baby Ward on Boxing Day. The conjuror who did such wonderful things with umbrellas and the ten of spades was probably in league with some old wizard, but the little people who sat round the Christmas Tree and laughed at him so heartily, without always quite knowing what he was doing, would have convinced the sceptic that the Christmas fairies were at the party in full force. The ward itself was certainly fit to receive them and the nursery favourites had been anxiously awaiting their arrival for two whole days. Humpty Dumpty sat on his wall and incidentally on the electric light, as did the old woman, who lived in a shoe, while the cow was making a most magnificent leap over the moon. Little Miss Muffet, Bo-Peep, and several others were there too, with all of the four-and-twenty blackbirds that had escaped baking. The ward was quite full at three o'clock, when Professor Bullivant commenced his entertainment and, although there were many doctors present, not one did the children half as much good as did the Professor. "Laugh and grow fat" says the old saw, and the little guests laughed to such good purpose that the red lines on their weight charts shot clean off the paper. And what if the lines on their temperature charts tried to follow suit? They came down again next day and the photograph produced here shows the full parade after the party, all alive and kicking. If you did not see the Christmas Tree on Boxing Day, don't be misled by the picture. Why all its branches did not break off is a mystery.

After tea had followed the conjuring and the Professor had put Joey to bed—Joey the talking doll, who wept real water—Uncle Dick climbed up the tree, Father Christmas stood at the bottom and each child had so many toys that it was a matter of impossibility to carry them all. And the crackers! No ordinary crackers these, but giant ones, which had to have six people at each end to pull them, and when they did bang out tumbled dozens of little ones, to be pulled in their turn.

That, very briefly, was the Children's Party, and that very emphatically is the best way to spend Christmas. If one grumpy old curmudgeon could cause half as much joy for just one day each year, he might be as disagreeable as he liked for the rest of his life and still be better than most of us. The pleasure that they gave was the only reward that was wanted by Sister Babies and the Nurses, who worked so hard for the success of the party and who succeeded so famously.

Photo by F. W. VIDLER, 48, Langler Road, Kensal Rise, N.W.10.

PATIENCE AND SAMARITAN.

This was a combined Concert for Pat and Sam and Evelyn. Which of the Sisters was responsible for the programme or whether it was a combined effort does not matter; the important thing is that the result was a most enjoyable and successful concert.

Miss Andrews deserves all praise, for she accompanied all the songs except two. Miss Greenwood and Mr. Cursor worked untiringly. They opened the concert with songs and brought it to a close with more songs. Their duets went particularly well. Miss McHugh also sang delightfully, and Miss Elworthy gave a couple of very clever recitals.

Of local talent there were Nurse Evans, Messrs. Jones, McKenzie, Laver and Harris, and last but not least the "Five Knaves Band"—so what more could one want.

Further, several men kindly put in an appearance but said they would only sing if absolutely necessary!

EYE WARD.

Local and other talent were very much in evidence at the Concert here on Boxing Day, amid the monkeys on the wall and the butterflies fluttering in mid-air.

A start was made with the "Five Knaves" in a jazz music and syncopated song stunt. Only three of them could be found to start with, the rest presumably being somewhere in the pack, but they made enough noise for the whole of the picture cards put together.

Murdo MacKenzie then gave us "Sea Fever," a stirring song of the call of the sea, followed by G. D. Shaw, who sang of Hezikiah and his girl Hortense. The topical lines of the chorus were much appreciated, especially the last!

Then we heard Clay Thomas, who sang as if he were broad-casting, in the delightful songs, "The Song of the Clock," and "Devonshire Cream and Cider."

Local talent burst forth again, with E. T. Lloyd in "Put some ginger in it," though, as several people remarked, how he had the nerve to sing that song in the Eye Ward, I don't know!

Miss Irene Ward then gave us some splendid recitations, first of an American Lady in a boot shop, and then of some children.

The first half of the programme was brought to a close by Clay Thomas, still broad-casting, with "Bulls won't Bellow," and "Carol Singers," and then tea was served, as only Eye Ward teas can be served, the audience munching to the now united efforts of the "Five Knaves."

The second half opened with Miss Olive Sturgess who gave us "A dancing lesson" and "Mighty like a rose," with such energy that the centre butterfly fluttered to the ground.

More local talent, in the person of H. Richards, produced a topical song (written by H. K. Wallace) and "Beaver," which was very popular, especially with the small boys. The chorus was punctuated with a stage dance by the same performer. After this display of energy we once more heard Miss Irene Ward, who told us delightfully of "The Lady who Obliges," and then gave us some more childern's pieces. She was followed by Sydney Phillips, who was excellent with "Go down, Moses!" and some sea songs.

And then we produced B. L. Laver, who sang, with an inimitable expression, "My Basutu Baby," and "Ma," songs which were both so popular the day before.

The entertainment was then brought to a close by the indefatigable H. Richards, who sang "Say it with music," and again accompanied the chorus with a classical dance, with such energy that we were all afraid he would disappear in a cloud of perspiration.

The ward was packed with a most appreciative audience, and we were delighted to see Mr. and Mrs. Eason and the Matron present, besides many other distinguished visitors.

Sister Ruth and Mr. Richards must be congratulated on the results of their energy, the latter both on and off the stage, and we must not forget the nurses, who worked so hard before and during the concert providing refreshments for all and sundry.

We finished a most enjoyable day by uniting in singing "God Save the King," in such a high key, that one or two notes in the middle were a tremendous test of loyalty, in which, however, I think most of us managed to pass, if not with First Class Honours. And now here's another cheer to add to the three so heartily given to that most delightful hostess, Sister Ruth!

ADDISON AND MARY.

The Addison and Mary Concert was held in Mary Ward on Friday, December 29th. The chief feature of the performance was the variety of the "turns." Soloists, entertainers, glee singers, a violinist, conjuror and jazz band were all greatly appreciated by a large audience, and it would be impossible to mention individuals among the general excellence of the concert.

CHARITY AND LUKE.

On Thursday the main trail was towards Charity Ward, where, at the invitation of Sisters Charity and Luke an excellent tea was provided to any who cared to come, followed by a concert, again under the direction of Mr. Corelli Windiatt, whose famous orchestra contributed several well-known selections during the afternoon.

Miss Carrie Laneley of Sydney then gave us two songs in her own charming manner, followed by Mr. Tom Wright, who greatly amused us by the account of his "Wedding Day"; later on he again excelled himself in "I forget."

Our constant supporter at these times, Miss Helen Mar, kept us convulsed in laughter with her humerous anecdotes and short stories. Surely one will never forget about the Discovery of America.

Later Miss Ella Shields gave us a most realistic portrait of "Burlington Bertie," much to the delight of all present.

Miss Rosina Filippi made a great impression with her dramatic recitation, "A Christmas Tale," but especially with her pathetic "Which shall it be!" Surely she is a great actress!

Then Mr. Ben Davies appeared to the accompaniment of much applause, and sang "Maire, my Girl" and the old favourite "Sally in our Alley" as none but he can.

Miss Lilian Tooley and Miss Molly Seymour treated us to some songs with violin obligato, the chorus of Peggy O'Neil especially appealing to the children.

Before the concluding selection by the orchestra, a vote of thanks to all those who joined so heartily in giving such a magnificent performance, and especially to Mr. Corelli Windiatt for having arranged such an excellent programme, was proposed.

Afterwards the National Anthem was sung, followed by cheers for Sir Alfred Fripp who was again, in so great a measure, responsible for the success of the Christmas festivities in Charity and Luke, and for Sisters Charity and Luke, to whom, in conjunction with their nurses and patients, is due the credit for the inception and execution of the most effective decorative schemes.

RUTH AND BARNABAS.

We have to thank Mr. Layton for a most enjoyable evening in the Eye Wards on Thursday, 28th December, when he brought along the 60th Divisional Concert Party.

The evening was one not only of great enjoyment to the audience, but also to the artists, "The Roosters." If you could have seen them in a certain corner room in the College afterwards, talking over old times with their former Major, Mr. Layton, you would have fully realised what a jolly crowd they were.

Proceedings were opened with a deafening chorus by the Royal and Ancient Order of Beavers who demanded an audience. The concert proper began with another opening chorus. This time snappy and tuneful. Then followed many amusing songs and sketches leading up to item 8, which is worthy of special mention in despatches. This consisted of an army skit, "Sick Parade," with the caste including Lady de Bathe, Captain Septic, Sergeant Scrounge, Private Dodge, and Private Swinger. This item has been performed many times before in Palestine, Mesopotamia, etc., during active service in the Great War, and was much appreciated.

Followed the interval, during which Sister regaled us with the choicest of dainties, while the party were completing their change for the second half of of the programme. The Beavers again yelled defiance and advice at the more hirsute members of the audience.

The party were just as great in the second half, where we discovered that one member had a face like india-rubber, and we must mention the pianist, who made such a charming lady that several people were disappointed when he removed his wig at the end. It must be an effort to play through such a concert without one piece of music.

The entertainment concluded with a "simple melody." If that was simple, I should like to hear a difficult one. It resolved itself into a musical argument between the advocates of the more old-fashioned slow rhythm and the modern supporters of syncopation—a very bright business. A very happy evening was brought to a close with three hearty cheers for Mr. Layton and "The Roosters."

DORCAS AND NAAMAN.

The concert this year started at 3.30 on Wednesday, 27th December, with a clever turn by Mr. Soper who played the same tune as a waltz, march, fox-trot, anthem, overture, and one-step. Then Miss Lena Elworthy who has an old head on very young shoulders, gave some delightful recitations.

The Cosmopolitan Five then played some of their inimitable dance tunes while tea was served.

After tea, Miss Monica Disney gave us two very attractive dances and was loudly encored. Then Mr. Selby performed brilliantly with songs at the piano, and Nurse Evans sang—to those who heard her no adjectives are necessary to describe the pleasure she gave us.

Then an abrupt change came over the scene, and that Mighty Man of War, Mr. Kid Lewis, boxed two exhibition rounds with his young brother, and showed us two of his championship belts representing the welter, middle and light heavy-weight championships.

Mr. M. MacKenzie then sang, and we were also delighted by selections from the Nigger's. Messrs. Harris, Hale-White, Shaw, and Laver all did their best.

The concert was concluded by some more excellent music by the Cosmopolitan Five.

JOB AND LYDIA.

On Friday, December 29th, the Annual Punch and Judy Show and Christmas Tree were held in Lydia. Children came from all parts of the Hospital, and greatly appreciated the entertainment, which was received with great applause by young and old. After tea, proceedings were further enlightened by the appearance of Father Christmas, who entered via the window to the frenzied accompaniment of cries of "Beaver."

Father Christmas then distributed presents, and great amusement was caused when Mr. Steward, Mr. Hughes, and Mr. Gaymer-Jones were presented with suitable toys. Mr. Milward then proposed a vote of thanks to Mr. and Mrs. Steward and the Sisters, which was a fitting end to a most enjoyable afternoon.

EVELYN.

A most successful children's afternoon was held in Evelyn on Thursday, December 29th.

The earlier part of the afternoon was spent in entertaining the children with various games, in which Sister, nurses, and students very heartily joined, much to the amusement of the younger generation.

Mr. Brown officiated at the piano, and Mr. G. D. Shaw, who made a most venerable Father Christmas, being greeted by cries of "Beaver" on his entrance through the window, distributed gifts to all the children present, amongst whom were several children of the Staff.

After tea and sweetmeats, which were demolished with astonishing rapidity, more games were played, until 6 o'clock, when the fond parents came for their very tired offspring, who voted the afternoon a huge success and in most cases were very loath to leave.

Mr. and Mrs. Mark Stone next gave their amusing item. Mr. Kid Lewis, owing to his sparring partner being unable to come down, obtained the services of Mr. Thomas, our Feather-Weight Champion, and gave us a two-round exhibition bout, which we very much enjoyed.

Next, the "Co-Optimists" rushed down to give us a few minutes of their wonderful talent. Miss Phyllis Monkman, Miss Betty Chester, Mr. Laddie Cliff and Mr. David Barnaby all gave us songs.

Mr. and Mrs. Victor Crawford then entertained us and kept us in laughter.

Photo by ALFIERI PICTURE SERVICE.

The Co-Optimists in Queen.

QUEEN AND VICTORIA.

The above Concert was held on Wednesday, 27th December, at 3.30 p.m. The programme was chiefly made up of outside talent.

Mr. Harold Selby gave an amusing monologue with the help of the piano. Mr. Ted (Kid) Lewis then told us a little about a boxer's life, and also gave us the pleasure of seeing his two Championship Belts. Mr. McKenzie sang two excellent songs, which proved that we have still some talent inside the Hospital. Mr. E. T. Lloyd helped "to put some ginger into" the concert.

Next, that charming child-dancer, Miss Monica Disney, held us fascinated with her "Butterfly Dance," after which she sang a pretty song.

Tea was served about 4.30 p.m. and the celebrated "Cosmopolitan Five" Orchestra entertained us.

The last item was that of Mr. Charles McConnell, Mr. Stanley Lupino's understudy, and little Miss Annie Donoghue, who came from the Hippodrome. "Micky" sang "My little Jenny," accompanied by Mr. J. Mott, the composer, at the Piano.

We must again thank all these people, for coming down to give us such a wonderful and successful afternoon.

ASTLEY COOPER AND CORNELIUS.

On Friday, Sisters Astley-Cooper and Cornelius welcomed a vast assembly in Astley Cooper Ward, (which was ingeniously ornamented by all manner of "flighty" objects,) to the Annual Concert and Tea—this year, for the second time, provided jointly by the two wards in the afternoon. The traditional New Year's Evening Entertainment was again

abandoned on account of the date falling during the week-end, but it is generally hoped that these two years will not provide precedents for the future.

"The Five Knaves" opened the ball with some popular jazz selections, then followed such a galaxy of talent as has been rarely surpassed in former years, drawn almost exclusively from local sources.

Our sole visitor, Miss Monica Disney, showed great promise for her future in her Shadow Dance and in her fascinating Dance-Song "Shuffling." Then Mr. Selby, after a series of short stories, gave a most terrifying account of the fate of "Poor Boob," followed by our inimitable "Super" with his troop of young "Beavers."

The Nursing Staff was well represented by Nurses Evans, Sheppard, Hobbs and Walshe, the first giving a magnificant rendering of "Softly Awakes my Heart," from Samson and Delilah, Nurse Hobbs being at the 'cello accompanied by Nurse Walshe.

Mr. T. E. Jones was at his best, especially excelling in Frank Bridges "Go not, happy morn"; so did Mr. Spurrell in "The Egg," and the "Roast Beef of Old England," and Mr. Fawkes in the ever popular "Songs of the Fair."

The Pirates were in great form in their "Any dirty work to-day," and in their irresistable "And so we go on," while Mr. Stoker thoroughly earned his reward, which perhaps was somewhat unusual in form, sundry vegetables of household reputation taking the place of the customary bouquet.

Later, "Our Super." again made many hearts to quake when he revealed so many "State Secrets," and Mr. Carling again pointed out their duty to the members of the Poultry Yard.

Before the concluding duet by Messrs. Laver and Harris, a vote of thanks to all those who provided such a splendid afternoon, especially to our little visitor, was proposed, after which the Curtain fell with the singing of the National Anthem.

Then followed hearty cheers for Sisters Astley Cooper and Cornelius for the splendid tea served during the interval. And so ended the festivities of another Christmas time at Guy's.

LAZARUS AND MARTHA.

This Concert was held in Martha Ward on the 28th December. We were very lucky in that we had throughout the afternoon a constant succession of brilliant musicians and singers all ready to help us. One remembers best, now that the Concert is long past, the magnificent singing of Mrs. Foster Whey, Miss Grace Maxted's harp solos, and the perfectly delightful Scottish duets which Miss MacKay and Miss Carr sang to us. Comic relief was provided by Miss Webster and by Mr. Jack Coleman. The Cosmopolitan Five kindly helped to get the concert started by playing their lastest dance tunes.

Tea was served in large quantities in the tea garden, among the teapots and the tealeaves, to the accompaniment of the dulcet tones of Mr. Richards' gymnastic chorus of trained beavers.

The concert was so popular that in the end the H.S. had to put himself on to sing to induce the visitors to leave.

Festival Dinner.

A Festival Dinner will be held in aid of the Royal Medical Benevolent Fund Guild (Educational Branch), at the Hyde Park Hotel, on Tuesday, January 30th, 1923, at 7.30 for 8.

Tickets, 17s. 6d. (including wine), may be obtained from: Miss Swinford Edwards, 68, Grosvenor Street, W.1, and Miss Morley Fletcher, 98, Harley Street, W.1, to whom all communications should be addressed.

The following ladies have kindly consented to act as Hostesses or Stewards or both:—Lady Alexander, Lady Atkins, Mrs. Barber, Lady Rose Bradford, Mrs. Henning Belfrage, Mrs. Cosmo Bonsor, Lady Bowlby, Mrs. Rowley Bristow, Lady Bruce-Porter, Lady Butlin, Mrs. Cameron, Mrs. Clogg, Lady Craig, Lady Critchett, Mrs. Daly, The Lady Dawson of Penn, Mrs. Herbert Eason, Mrs. Eden, Mrs. Swinford Edwards, Lady English, Mrs. Laming Evans Mrs. Fairbank, Mrs. John Fawcett, Lady Fripp, Mrs. Gandy, Mrs. Hadley, Lady Hartley, Lady McGarel Hogg, Mrs. Hutchison, Mrs. Kendal, Miss Lankester, Miss N. Lankester, Mrs. Levick, Lady Lewis, Mrs. Mennell, Mrs. Mollison, Lady Mott, Mrs. Norbury, Mrs. O'Malley, Mrs. Ormond, Mrs. Phear, Mrs. Poulton, Lady Rigby, Mrs. C. Hubert Roberts, Mrs. R. P. Rowlands, Mrs. Sherren, Mrs. Lewis Smith, Mrs. Theodore Thompson, Lady Thompson-Walker, Mrs. Herbert Tilley, Lady Wallace, Mrs. Waugh, Mrs. Zamora.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Pass List.

University of London.

M.D.

DECEMBER, 1922.

Branch I—Medicine.

Maurice Coburn, B.S.

Royal College of Surgeons of England.

F.R.C.S.

FINAL EXAMINATION.

J. F. H. Stallman. V. Wilkinson.
L. C. S. Lindon. R. B. Chandrachud.

Society of Apothecaries of London.

L.M.S.S.A.

DECEMBER, 1922.

Midwifery.

*C. F. Parry.

*Has now completed the examination, and has been granted the Diploma of the Society.

University of Cambridge.

2nd Examination for Medical and Surgical Degrees.

PART I. DECEMBER, 1922.

V. C. Benson.

3rd Examination for Medical and Surgical Degrees.

PART I.

Surgery, Midwifery and Gynecology.

F. E. Graham-Bonnalie. H. W. Taylor.
F. D. Howitt. R. H. White.

M.B., B.Ch. Cantab.

R. R. Traill.

Reviews.

Anatomy and Physiology for Junior Nurses. By Félicie Norton. (Scientific Press, Ltd.) Price 2s. 6d. net.

The chief merits of this little work are its conciseness, and a simplicity which must certainly commend itself to the junior nurse studying anatomy for the first time. Diagrammatisation of most of the illustrations leads here and there to inaccuracies which would not be tolerated in a treatise on anatomy, but which do not impair the value of the work as an elementary guide to anatomy and physiology for junior nurses. Senior nurses will, if they are intelligent, need much more information than the book supplies, but as a handy volume for the acquisition of elementary knowledge, and for revision in the case of junior nurses, it undoubtedly fulfils a useful function.

The Glaxo Baby Book. (Advertising Dept. Glaxo House.) Price 1s. 2d.

While primarily an advertising booklet, this little work contains so much estimable advice, tendered in a form likely to be easily assimilable by non-medical people, that its influence upon ignorant mothers is certainly likely to be of the best. The importance of breast-feeding is very strongly emphasised, and, if it is true that many mothers wean their babies, or feed them upon artificial food from the beginning, without due reason, it may at least be said that this booklet does not countenance the improper use of the preparation it is designed to advertise.

The question of infant feeding is dealt with from the point of view of co-operation with the family practitioner. Practical advice on every phase of infancy from birth to three years of age is given in the booklet, and one may well imagine that the pictures illustrating Glaxo babies show the results of the admirable treatment suggested in its pages. There is little in this booklet which is not in accordance with sound teaching.

Rugby Football Club.

CHRISTMAS TOUR IN FRANCE.

Owing to the large number of South Africans playing Rugger at the Hospital, the Committee decided to endeavour to arrange a tour for them at Xmas and so make the festive season more enjoyable for those unable to get to their homes. Two matches were arranged, with an interval of two days between, thus making a less strenuous time for the players than was possible in South Wales last Easter.

Eighteen players and reserves left Victoria at 2 p.m., and arrived in Paris at 10.30 p.m. on Xmas Eve. There, after a very vigorous game, and as one regular member of the side states, "The best this season," a draw was made in the match against the Stade Français on Xmas day.

In the evening after the match both sides dined together, and with the aid of a little wine, but in spite of a most limited knowledge of the language spoken by our hosts, a very amusing and enjoyable evening was spent. One or two speeches were made and according to interpreters everyone was pleased with the game and the spirit in which it was played.

About 16 were able to visit Versailles in the afternoon of Boxing Day, where a most interesting

couple of hours were spent. All present were inclined to believe most of it and its contents were made in "Time of Louis XIV."

Since two of those who had left Victoria with the team had returned to England, the remainder, with two more from home, left Paris at mid-day on Wednesday, 27th December, and arrived at Poitiers at 5 p.m.

It was a great relief to be greeted there by one who spoke English. Having spent a quiet evening in the provincial town, we met our opponents in a café on Thursday morning and exchanged good wishes over glasses of champagne.

Owing to the weather the ground was a perfect reproduction of a typical Welsh ground after 10 days rain, and the game was accordingly very largely a forward struggle. It also resulted in a draw, the score being 2 tries each.

The return journey was broken at Paris, where we arrived from Poitiers at 10.45 on Thursday evening and left for England at 8.40 Friday morning with a greatly improved opinion of French Rugby and sport. S. P. MEACOCK, Hon. Sec.

GUY'S v. OLD ALLEYNIANS.

Neither side was at full strength for this match. Our own weakness was chiefly forward, that of the Old Boys in the back division. It was a bitterly cold and foggy afternoon, and the ground was scarcely soft enough to play on after the night's frost. Still a good even game was witnessed, with plenty of dash and some good dribbling by the Alleynian forwards. Before five minutes had elapsed a round of passing left Fellows-Smith with the ball, and a try too wide from the posts to be converted resulted. We had a good deal of the ball for some time, and Van Schalkwijk, who played a very fine game indeed, got Williams off more than once, but the Old Boys' tackling was good and nothing came of these movements till close on half-time. Then Williams, receiving from Van Schalkwijk, well outside the home "25," got in a splendid run and scored behind the posts. Van Schalkwijk converted.

Ends were changed with the score 10 to nil in our favour. In the second half we ought surely to have doubled this total, but the forwards fell away. They lacked that *élan* which one expects from a Guy's pack. Eckhoff was noticeably energetic, but no one else, except Neser, appeared up with the ball. Albertijn was too well marked. Fellows-Smith got away well, but he failed in the final burst.

On the other side of the picture were several concerted rushes by the Alleynians, who forced their way to the line. First Blanche dived over and scored, and within a few minutes he did it again. Guy's got going again soon afterwards and a neat cross kick by Van Schalkwijk enabled Neser to touch down. Badenhorst converted cleverly. The end came with the total:—Guy's, 2 goals 1 try (13 points); Old Alleynians, 2 tries (6 points).

GUY'S v CARDIFF.

On December 16th the Hospital XV. journeyed down to Cardiff and were defeated by 4 goals (20 points) to 1 try (3 points). We kept the scoring down in the first half, only 1 goal being registered against us during that period, but the second half we rather went through it. The ground was heavy. As a matter of fact the Cardiff Arms Park generally is, but recent rain had fallen. The score against us came from a punt and strong dribble, A. Cornish being the actual scorer and Wallace kicked the goal.

The second half opened with Cardiff pressing and Davis took an unsuccessful drop at goal. Albertijn made ground on resuming and then another drop came. Fellows-Smith could not clear before Johnson got up to him and the Cardiff centre, Clem Lewis, scored a try for Wallace again to convert. A little later Johnson was the actual scorer of a very fine try. He ran very well indeed and many Guy's men failed to hold him. Wallace again converted. Almost within 5 minutes the same player, T. Johnson, got up to Badenhorst and punted over our full back's head for Vaughan to gain possession and secure the fourth and last try for Cardiff. As Wallace was once more successful with the place kick, the score now stood at 20 points to nil against us. Towards the end the Hospital had more of the play and some passing was indulged in. Eventually Albertijn managed to score an unconverted try far from the posts.

There is not much to be said, one fears, in commendation of our team. They were all triers, but the absence of Doherty, Taylor, etc., was a great drawback. After Xmas one hopes we shall once again approach full strength and so successfully negotiate the remainder of our formidable fixtures. Even though the score was heavy against us at Cardiff, there were many occasions when fortune deserted us and the balance of luck certainly all through the game failed to dip on our side.

Guy's Team.—W. Badenhorst, G. R. Mostert, P. K. Albertijn, J. G. Van Schalkwijk, R. Fellows-Smith, F. Bekker, H. Finnemore, E. E. Neser, N. M. Holloway, B. G. Scholefield, F. G. Hutchinson, G. Zondagh, G. C. Cameron, De Wet Vorster, H. J. du Toit.

Births.

GENGE-ANDREWS.—On November 27th, 1922, at 21, Craven Road, W.2., to Dr. and Mrs. G. Genge-Andrews—a daughter.

DEAN.—On December 18th, 1922, at Kimbolton, Hunts., the wife of Christopher Dean, M.D., a daughter.

HURST.—On December 19th, 1922, at 21, Kensington Palace Mansions, W.8., to Cushla, wife of Arthur F. Hurst, M.D., F.R.C.P., of Heath End, Ascot, a daughter.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

JANUARY 26th is the bi-centenary of the death of Edward Jenner, and we hope to publish in our next number reproductions of the Diploma of Associate, which the Hospital Physical Society conferred upon him, and also of the testimonial, which the Society gave him. These are being kindly procured for us through the courtesy of Mr. C. J. Thompson, Cuartor of the Wellcome Historical Medical Museum.

In his Inaugural Address, delivered before the Physical Society, on November 6th, 1919, Sir William Hale-White quoted the following extract from Baron's Life of Jenner, 1827 :—

"But the proceedings of this kind, which were calculated to convey to the heart and mind of Jenner, at this time, the greatest satisfaction, were those of the Physical Society of London (this, of course, is incorrect; it should be the Physical Society of Guy's Hospital) which holds its meetings at Guy's Hospital, Southwark. At one of these meetings, unusually full, a memoir on the subject of vaccine inoculation underwent long, serious and simple discussion. Dr. Jenner himself attended on four successive nights, having received an express invitation and request from the Society for that purpose.

"On entering the Theatre he was constantly received with universal and rapturous applause, and as no discussion was ever of greater importance or of deeper interest, none probably ever attracted in a higher degree the attention of professional and scientific men. At the conclusion of this animated debate, the Society expressed to Dr. Jenner their deep sense of the value of his discovery, their opinion of its efficacy and their profound veneration for its author. After professing their conviction of the prophylactic powers of vaccination, and that it is quite free from any such effects as that of 'calling forth those latent seeds of disease which occasionally arise after small-pox, even under the test management,' the Society thus expressed the sentiments of its members—'We feel the warmest sensations of gratitude and respect for the liberal manner in which the author has communicated his discovery, uninfluenced by any motive of self-consideration; and we contemplate the discovery itself as a memorable epoch in the annals of medicine. The Society presumes to hope that the author of this happy discovery will meet with that reward, from his grateful country, which he justly deserves for having thus rendered

himself the benefactor of mankind.' A new order of merit was instituted on this occasion, the members of which are called Honorary Associates. This distinction is to be conferred solely on the authors of some remarkable discovery in medicine. The President, after an eloquent oration, presented to Dr. Jenner the subjoined Diploma."

The question of vaccination, which has been so much discussed by the public during the last few months, is a constant pitfall for those students, who are unable or too conscientious to avoid inquisitive friends. The majority of students and a large proportion of the public are quite ready to profess "their conviction of the prophylactic powers of vaccination," but there always remain a large number, who are ready to oppose vaccine therapy until one and all have expired at Long Reach. These very sincere anti-vaccines meet argument with argument, statistics with yet more statistics, and we know of more than one student, who has been worsted in the contest. Even after attending Dr. Wanklyn's lectures they cannot hold their own. Here, then, is an opportunity for a meeting of the Physical Society, similar to the one held in 1802. If the Society could bring together a specialist in vaccine therapy, such as Dr. Wanklyn, and oppose to him an ardent anti-vaccinationist for a debate on the prophylactic value of vaccination, its members could be assured of a record attendance, and the more argumentative of them would be anxious to renew discussions with their anti-vaccination friends.

WE have received a note from the Medical School Office, asking us to remind students, who have not already done so, to send a copy of their photograph for adhesion to their record cards. As there is no competition attached to this request, a "study" by a west-end photographer is not necessary, the humble "sticky-back" being quite sufficient. By having a photograph of each student on his record card, the work of the Staff for signing up purposes and when the question of appointments is considered, is greatly facilitated. They also ask us to state that the Medical Students' Calendar is now ready and may be obtained on application to the Medical School Office.

A NEW series of six post-cards, showing views of the Hospital, is now on sale at the Appeal Office, next door to the Counting House, price 1s. per packet. The proceeds from the sale of these cards are to be devoted to the Hospital Funds.

THE proceeds from the sale of the Hospital Christmas Cards amounted to £35 2s. 10d. These cards were presented by Messrs. Ash & Co., Ltd., to whom the Hospital conveys its sincere thanks for their generous gift.

JANUARY is a dull month. Not only has one the galling experience of breaking all one's New Year resolutions, but examinations and the weather vie with each other in reducing spirits to their lowest ebb. Add to this the knowledge, generally true, but not generally faced, that the quarter's allowance has been mortgaged to provide the means for Christmas festivities, and the grim humour of the advertisement facing the Hospital becomes apparent. "Why not take a Winter Holiday, where sunshine reigns?" asks this unnecessary poster. If only questions at the Final Conjoint were as easy to answer!

WE publish in this number a letter from Professor Pembrey in connection with the Hospital War Memorial Fund. A student has

contributed five pounds anonymously and has promised a further twenty pounds provided that the balance of £125 is contributed on or before February 16th. As £24 13s. has already been received, one hundred pounds is all that is wanted to complete the fund. There are nearly a thousand students at the Hospital and we feel sure that after so generous an example has been set them, they will see that the money is forthcoming. Half-a-crown from each student will be sufficient, if all help, although larger amounts will be welcomed. Put your donation in an envelope, addressed to Professor Pembrey and take it to the Medical School Office, so that we can report in the next number of the GAZETTE that the Fund is complete.

L. G. H.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR MR. EDITOR,—I have much pleasure to enclose herewith, details of subscriptions received since my last appeal for further funds towards the Guy's Hospital War Memorial Fund.

We have received an offer from one of the present students, who has contributed £5 anonymously, to the effect that he will be glad to give a further £20 *provided that the balance of £125 is contributed* on or before February 16th, next. Towards this sum we have received £24 13s., so that the amount to be obtained by the Fund in order to obtain this extra donation, is £100. I shall be glad if you will make this known in your columns, and I trust that we shall have no difficulty in raising this extra money to complete the Fund and so be able to take advantage of the kind offer made above.

All subscriptions should be addressed to the undersigned.—Yours sincerely,

M.S. PEMBREY,
Hon. Sec. Guy's Hospital War Memorial Fund.

Medical School,
Guy's Hospital,
London Bridge, S.E.1.
January 16th, 1923.

Further Donations to the War Memorial Fund.

	£	s.	d.
Amount already acknowledged	5,395	18	4
Major Thomas	2	2	0
H. G. Spon, Esq. (third instalment) ...	10	10	0
E. Penny, Esq.	1	0	0
H .G. Spon, Esq. (third instalment) ...	10	10	0
Anonymous	5	0	0
G. H. Bedford, Esq.	10	0	0
A. Wills, Esq.	2	2	0
	£5,427	13	4

The donation of Major Brook-Churchill's, reported in the last issue, should read "Second Donation."

The following letter was received by the Principal of a school at which one of the teams had occasion to change.

Mr. ———,

Dear Sir

The washing of the Towels for last, week was four shillings. The Men what turned up last week, I think it was Guys Students, which I want particular, to point out, are not at all decent, in themselves, they were in the washing Lavortary naked, which is not right in any case; on LCC. premises and also among so many Men only 8d. was left in the plate, I am reporting to the Council. Also they have done something to the lock in one of the Classrooms, which the Teacher cannot Close the door.

Yours' faithfully
Mrs. Stewart

Interesting Cases in the Medical Wards.

Under Dr. Fawcett—

Stephen 42.—Syphilitic Ulcer of the Scalp, and Syphilis of the Liver and Spleen.
„ 32.—Hypopitintrism.

Under Dr. French—

Addison 26.—Congenital Heart.
Mary 5.—Infective Endocarditis.

Change of Address.

Edward Deane, Penmarch, Manor Road, Milford-on-Sea. ('Phone, Milford 37).

T. C. Lucas, Barns Farm, Hawkesbury Upton, Badminton, Gloucestershire.

Correction.

C. H. Laver, The Red House, Redhill.

Notes on Four Cases.

Acute Appendicitis.

In a recent post-graduate lecture on "Mis-diagnosis of Appendicitis,"* the lecturer referred to the excellent rule that one should hesitate to diagnose acute appendicitis if the temperature be over F. 102·5.

While experience emphasises the value of this rule, the following case shows that exceptions do occur.

A youth, aged 18, consulted me about mid-day on December 8th, complaining of nausea and abdominal pain. He said he was quite well the day previously, but had awakened at 2 a.m. with pain in the abdomen and that at 6 a.m. he had vomited. He eat no breakfast, but followed his usual occupation in the morning. His bowels acted normally. He had at this time a temperature of 102·5°. His chief complaint was of pain about the umbilicus and he said he had bicycled to my house since walking "doubled him up." On examination there was diminished respiratory movement below the umbilicus on both sides and some resistance of the lower right rectus muscle. Perhaps increased tenderness over McBurney's spot, and pain on flexion of the right hip. Tongue clean. Pulse 100. He was sent to bed and Mr. Bromley was asked to come down prepared to operate.

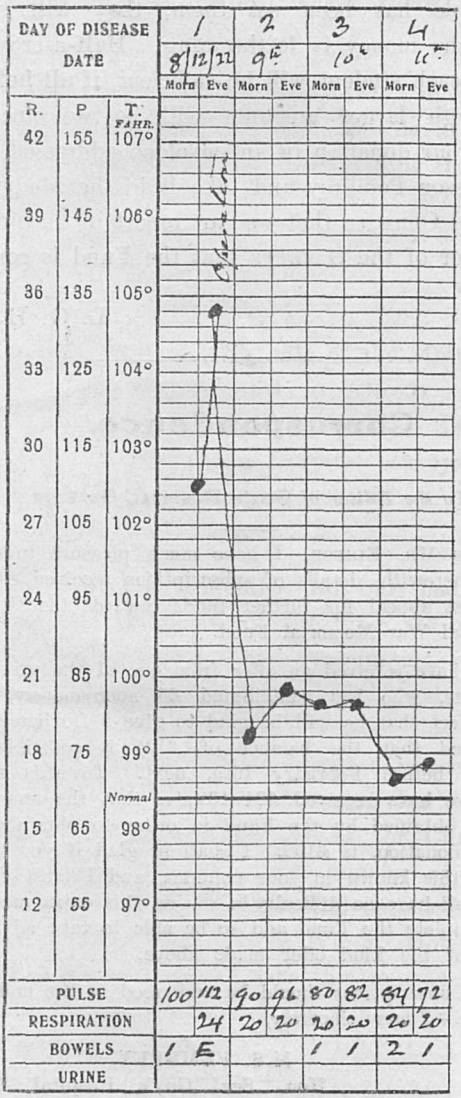
By 3 p.m. his temperature was found to be 104·5°. A careful examination failed to reveal any mischief in the chest or about the liver. His tongue was clean and nothing could be found in the throat or elsewhere.

He was seen by Mr. Bromley at 7 p.m., at which time his temperature was 104·8°, but the patient was moving freely in bed, his voice was strong, and he did not look at all seriously ill, though slightly drowsy when undisturbed. The abdominal signs were much less marked than at mid-day; there was no rigidity of the abdominal wall and deep palpation (with negative results) was possible in the right iliac fossa. Rectal examination showed a loaded bowel and tenderness in the upper pelvis, but no definite tumour. He had not passed urine since mid-day, but the bladder was not distended.

Mr. Bromley determined to have an enema given and to see him again an hour later.

At 8.30 p.m. he was found in much the same condition. A large normal motion had been passed, but no urine. Renewed rectal examination showed nothing definite beyond much tenderness in the pelvis. The respiratory movements of the lower abdomen were diminished and there was more tenderness in McBurney's area than there had been an hour previously.

Catheterization gave 4 oz. of normal urine. Mr. Bromley operated at 8.45, making a low incision, expecting to find the trouble in the pelvis. There was little or no free fluid in the abdomen, and the visceral peritoneum appeared normal, there being no adhesions or congestion. The appendix, which lay in a normal position, was easily drawn out, and found to be of normal length, but irregularly swollen and œdematous. On laying the appendix open, after removal, the walls were found to be swollen, the mucosa congested in patches and fluid blood



*Norman Lake, *Clinical Journal*, 13th Dec., 1922.

was found free in a dilated segment about the junction of the middle and distal thirds. The terminal half inch was occluded by old standing fibrosis with inclusion of a small fæcal concretion.

The next morning the patient's temperature had fallen and he made an uneventful recovery. Unfortunately no culture was made.

G. H. PENNELL.

Edenbridge.

? Puerperal Eclampsia.

Mrs. T. M., aged 30, had had six previous normal confinements and a month before her seventh asked me to attend her with the District Nurse. I examined her on November 30th and found everything normal except for œdema of legs with large varicose veins. The urine was normal. I saw her again four days before her confinement and she was very fit.

She was confined on December 27th by the District Nurse and I was not called, though I saw her late in the day for severe after pains. I did not see her again till January 7th (eleventh day of the puerperium) when her husband sent for me. He stated that she woke up feeling perfectly well, suddenly complained of numbness in the left side and then had a fit.

On examination I found her conscious but heavy, answering questions slowly. She said she had suddenly lost her senses and then, according to her husband, started to shake all over. Close questioning to differentiate between a fit and a rigor was more in favour of a fit. (She had never had one before.)

Her temperature was 101·8°, pulse 136 (slightly intermittent) and respirations normal. No œdema of face, tongue clean, chest normal, slight mitral murmur, breasts normal, abdomen supple, uterus 2 inches above pelvis hard and not tender, a definite fœtor on turning back the bedclothes, and a red sour discharge requiring about four cloths daily. No swelling of the legs. She had had her bowels moved the day before, but there had been some difficulty during the past ten days. She had not been sick, but had taken her food well.

I passed a catheter. The uterus was definitely enlarged and the rectum loaded with fæces. There were no lacerations. The urine contained a slight haze of albumen after three minutes boiling. I gave her a diaphoretic mixture and hot water bottles and an enema and soon had her sweating freely.

At 2.30 p.m. I arrived at the house again with Dr. Blake for a consultation. She had then just had another fit, and when we saw her was bright and perfectly conscious and said she felt very much better. Pulse and temperature were the same, and a catheter specimen contained a definite cloud of albumen.

The question of septicæmia or eclampsia was discussed. I further elicited the fact that she had not been sleeping at all well since her confinement and had had bad headaches. This, together with the pulse and temperature, subinvolution and discharge was strongly in favour of septicæmia, especially if the "fit" was a rigor after all, whereas on the eclampsia side we had two suspicious "fits" and albuminuria. Her marked improvement of condition after the last fit made us hopeful that it might be eclampsia and that she'd terminated it as suddenly as she'd begun. We decided, therefore, to compromise and I gave her a high hot vaginal douche and 2 pints of rectal saline which she retained. Her skin was acting freely. I then gave her morphia, gr. $\frac{1}{4}$, and left her very comfortable for the night.

Next morning I arrived at 10 a.m. to find that after a very quiet night she woke up just before 10 and at once went off into a fit. I found her unconscious and the urine was heavily loaded with albumen. I got her straight to hospital. She had another fit on the way in the ambulance and after a succession of fits died at 9 a.m. the following day. There was no post-mortem.

Correct diagnosis and treatment, please.

H. W. EVANS.

The Firs,
Reedham, Norfolk.

Growth of the Rectum in a Male, aged 18.

W. T., æt. 18 years 8 months, was admitted for pains in the abdomen into Luke Ward, on the 30th December, 1922, under the care of Mr. Turner. He had been anæmic during the last 3 years.

In September last the patient had an attack of pains in the right iliac fossa lasting for four days, and he kept to his bed. These symptoms disappeared, but on the 18th October he was awakened at 5 a.m. by sudden and severe pains of an acute nature which were referred to the umbilicus and right iliac fossa. He was doubled up with pain for three-quarters of an hour and was unable to stand. After this he remained in bed for three weeks and was so ill that his parents despaired of his life. During the first two days he suffered from diarrhœa, accompanied by "slime." The pain persisted in a much milder form for eight days. Since this illness the patient had noticed "slime" in his motions constantly, and he had become con-

stipated; but had never noticed any passage of blood. He had lost weight and had felt weak up to the day of his admission.

Examination of the abdomen revealed no palpable tumour, but there was tenderness in the left iliac fossa. On rectal examination a hard, œdematous mass was felt on the posterior aspect of the gut and a distinct transverse ridge. No ulceration could be defined. The rectum was quite fixed. By means of the sigmoidoscope a nobbly mass was seen, and the transverse ridge which had been felt on digital examination. Beyond the ridge was an ulcerated area. The further passage of the instrument was obstructed.

Under anæsthetic a lump could be felt in the left iliac fossa. The abdomen was opened below the umbilicus. The passage of the hand into the pelvis was effectually barred by a large hard mass which undoubtedly involved the pelvic colon and which filled the whole pelvic cavity. When an artificial intussusception was made by the finger of the gut immediately above the growth, and the finger pushed down, the growth could be felt firmly gripping the finger. No affected glands could be found and the liver, apparently was not involved. No microscopic specimen was obtained. A transverse colostomy was performed.

I am indebted to Mr. Turner for permission to report this case. I. B.

Perforation of a Duodenal Ulcer in a Woman of 71 Years of Age.

Mrs. C. B. was admitted into Martha Ward about midnight on the 8th January, 1923, with severe abdominal pains.

Previous Diseases.—A history of rheumatism, gout, and sciatica, many years previously, was obtained; also one of constipation, but not of abdominal pain.

Present Disease.—The onset of the attack was sudden, seven hours before admission, being placed all over her abdomen. She had vomited a little fluid. Her bowels had acted on the previous day.

Condition on Admission.—The patient, who suffered severely, groaned as she held her hands upon her pendulous abdomen. So protuberant was this that it flopped from side to side, giving the impression of a large ventral hernia or of an ovarian cyst. On percussion a resonant note was obtained, not disproving the diagnosis of ovarian cyst, to which some gut may have been adherent. The skin was flabby upon her; she had most probably lost weight recently. Her respirations were peculiar, being shallow, rather rapid, and each accompanied by a grunt, and by movement of her abdominal wall, suggesting an attempt at restraining the painful contractions of her diaphragm. Deep palpation proved possible provided her attention was distracted. There was no sign of distention; her tongue was furred but moist.

All subsidiary investigations proved negative. On admission her pulse rate was 80, her temperature 98, and her respirations 30. The diagnosis made was a probable obstruction, due to a ventral hernia, or to a volvulus.

During the night her pulse rate rose steadily to 120, her temperature to 99°, and her respirations to 38.

On operating Mr. Medlock found that there was no ventral hernia, that the abdominal wall was exceedingly thin, that the peritoneal cavity contained much turbid yellowish fluid, and that there were two large calcified glands in the uterine broad ligaments.

A perforation, the size of a small pea, was placed on the anterior aspect of the pylorus. This was closed and the pelvis and epigastrium were drained separately, after swabbing to remove some of the fluid.

Curshmann's solution, strychnine, and nasal oxygen were all given but patient succumbed the following day at 4 p.m.

Post-Mortem Report.—An ulcer was found on the duodenal side of, and practically touching the pyloric ring. In size it corresponded to a halfpenny, was undermined, slightly indurated with a perforation in its centre. No suspicion of the malignancy of the ulcer was raised; firstly, because it was duodenal in position, secondly, because neighbouring lymphatic glands were not enlarged.

This case is also exceedingly interesting from a medical point of view, for in spite of the age of the patient, recent mitral vegitations were discovered, and some atheroma of the pulmonary artery. Owing to her condition an adequate history was not obtained. No doubt she would have given a history of a duodenal ulcer, which would explain indirectly her undernourished appearance.

I am indebted to Mr. Fagge and Mr. Medlock for their kind permission to publish an account of this case. S. P. J.

(Notes on a Case of Urachal Cyst will be found on page 32).

Specialities.

W. OWEN HOPKINS, Manufacturing Prescription Optician, 69a, Duke St., Grosvenor Sq., London, W.1.

To those interested, attention is drawn to Mr. W. Owen Hopkins' announcement in our publicity columns. As a Manufacturing Optician of wide experience, he has established himself at the above address, where he carefully carries out Ophthalmic Surgeons' instructions.

Circumcision.

Distribution.—Circumcision is a widespread ritual operation. It was practised by the Egyptians about 2000 B.C. It was a primitive Arabian custom performed on the boy's entrance to puberty. It was practised among the ancient civilized people of Central America. It is still kept up by the Jews, Arabs, Persians, Indians, Turks, natives on the Amazon, Kaffir tribes, Christian Copts, Australian natives, and others. The age at which the rite is performed, and the technique of different races vary considerably.

Jewish Technique.—Every healthy Jewish boy of a non-hæmophiliac family is circumcised on the eighth day after its birth by a Mohel, *i.e.*, a Rabbi who had received special training in the art of circumcision from a doctor and from Rabbis. The following is a description of the last ritual operation witnessed by the writer. The child's thighs were abducted by the godfather, on whose lap it was placed. The Mohel grasped the prepuce between the thumb and index finger of his left hand, quickly pushed the glans away from it, and placed a shield* in a slightly oblique direction between the finger and glans. He then amputated the prepuce with one sweep of his knife. The shield fell off simultaneously. Seizing the mucous membrane near the frenum with blunt forceps, the operator tore it for about a quarter of an inch, and rolled it fully back over the glans. The operation was completed by wiping the blood off by means of wool, and applying a tight dressing of Dermatol or Bimuth Subgalate. No ansæsthetic was given and no stitches were used. The child cried much less than children usually do during the induction of anæsthesia, as the whole operation was over in about sixteen seconds.

The Mohammedan Method.—The operator is a barber, who secures with a string the distal end of the prepuce and pulls it through a hole made in a disc of hardened leather. He then amputates the prepuce with a razor or scissors by making a circular incision, between the disc and skin. He does not remove or split the mucous membrane, so that the glans retains a covering. Burned rags are used as a hæmostatic. The operation is usually performed at puberty, though it is often done earlier.

Other Methods.—In India a wooden probe is used to separate adhesions between glans and prepuce. Some Australian natives employ stone knives for the operation, while the inevitable assegai performs the rite for the Kaffir.

Other mutilations of the Genital Organs.—According to one school, circumcision should be included in the list of mutilations of the genital organs, which was a popular practice among some primitive races. A few of these should, therefore, be mentioned.

Clitoridectomy is analogous to circumcision and is performed in some parts of Arabia, in Egypt, in Abyssinia, and in Peru.

Hottentot's Apron.—It is alleged that the criterion of beauty among the Hottentot ladies is the length of their nymphæ. The would-be beauty therefore suspends weights from her labia minora, and thus gently persuades them to hypertrophy considerably, till, according to some, they reach her knees.

The "Terrible Rite" of the Australian Aboriginal consists in slitting open the male urethra for almost its whole penile length. A more elaborate operation is carried out by the natives of Fiji and Tonga. An artificial opening is made in the urethra, and a thread passed from it to the meatus. The thread acts as a seton and is occasionally pulled backwards and forwards so as to cause pain and hæmorrhage.

Object of Circumcision.—Three theories are put forward as explanations of the primary purpose of the rite. They are (A) The sacrificial theory. Those who hold this theory regard circumcision as an economical substitution for human sacrifice—a part of the body being given to the gods as a compensation to them for not sacrificing the whole body. But this theory is not acceptable, because (1) if it offered the correct explanation, the prepuce would have been presented to the gods; *i.e.*, something would have been done with the prepuce after its amputation to symbolise that it belongs to the deities, or that it represents human sacrifice. This, however, is not the case—the prepuce is unceremoniously neglected immediately after its separation from the body.

(2) The ancients feared the wrath of the gods too much to dare to make them victims of such a one-sided transaction.

*The shield is a U-shaped instrument which clasps the prepuce between its limbs and keeps the glans back.

(3) Animal sacrifice—a frankly admitted substitute for human sacrifice—co-existed with circumcision, and probably preceded it.

(4) Had it been a reminiscent of human sacrifice, Moses would have eliminated it from Jewish ritual.

(B) *The Tribal mark theory.* — This theory is in agreement with the reasons given in various places in the Bible, and is upheld in the writings of the Jews, Maimonedes and Spinoza, and of the Gentiles Tacitus and Spencer. Furthermore its draws support from the fact that different races had various mutilations as a mark of distinction between them and others, *e.g.*, the knocking out of front teeth among the Hereos of Africa and the legendary amputation of the little finger among the stalwarts of Bar-Kochba. Against this theory it is argued that (1) The genitalia are not enough uncovered to serve as an indication mark between warriors of different tribes. (2) The practice was very popular amongst neighbouring tribes. (3) The Gentile slaves of the Israelites had to be circumcised. (4) Clitoridectomy would have been more common. It was never practised by Jews.

(C) *The Utilitarian theory*—namely, that the operation was performed as a protection against evil spirits or for hygienic reasons. This school claims support from Exodus where it is recorded that Zipporah saved the life of Moses or of his son by circumcising the latter. But this alone constitutes insufficient evidence, as no other uncircumcised persons were reported to have had recourse to that measure when in danger. For cleanliness and hygiene it is urged (1) that especially in hot countries the individual is predisposed to phimosis if the secretions are retained under the prepuce. (2) That circumcision leads to cleanliness (Herodotus). (3) That it is a prophylactic against local carbuncle (Philo).

This theory is supported by modern scientific evidence. Theoretically the circumcised person should be less liable to syphilis, because the exposed mucous membarne becomes changed into true skin which is less vulnerable. The sulcus between the corona of the glans and the foreskin can no more form a temporary shelter for organisms which may be pathogenic. Statistics prove that syphilis, both acquired and congenital, is much less prevalent amongst Jews than among Gentiles. Not only are the tortures of phimosis and paraphimosis avoided, but also epithelioma of the penis, which is said never to occur to a Jew.

It is contended that the acceptance of this explanation involves the attribution of a motive of cleanliness to some coloured races, who revel in uncleanliness, but, as will be shown under the following heading, this argument does not arise. This theory also credits the originators of circumcision with anticipating some of the modern scientists' knowledge. Scattered among the nearly obliterated records of ancient nations one frequently finds, in the form of legend, folk lore and superstition, unmistakeable evidence of either decayed civilisations or degenerated scientific systems. These facts are often so impressive as to tempt one to conclude that, just as in the economy of the individual, periods predominantly anabolistic alternate with periods during which katabolism has the upper hand, so in the history of humanity evolutionary epochs alternated with devolutionary epochs. Thus, practices founded upon a rational basis often have to disguise themselves as apparently meaningless or irrational customs and as magical or religious rites, so as to survive an unsalutory "dark age" or an ebb in the tide of progress. For example, the ancient Egyptians knew the value of the bath; the Jews used to isolate their sufferers from some zymotic diseases, about 3000 years ago; many of the old Jewish laws regarding food and married life were as if based on modern physiology and bacteriology. So one could go on quoting cases where rational therapeutic and prophylactic measures were employed by our more or less remote predecessors in the guise of religious observances. It is probable that many a present rite originated as a scientific medical measure, but during the course of ages and its adoption and modification by various people of different stages of culture, its primary purpose was forgotten, and it became transformed into a purely religious or social custom. Circumcision should be looked upon as one of these measures.

Origin of Circumcision.— Did circumcision arise independently in different parts of the earth, or was it started in a single locality and thence dispersed to its present areas of distribution by the wanderings of the ancient people? The only argument against one centre of origin is the wide distribution of

the practice; it is, therefore, assumed that it arose at a very early stage in human history, when the Americas and Australasian islands were still in communication with the rest of the world.

If it arose among a rational people as a hygienic measure—

(1) Only healthy individuals would have been subjected to it.

(2) It would have been practised at an early age when the pain of the operation was least appreciated.

(3) In order to allow the subject to derive the full benefits of the operation, the mucous membrane would have also been reflected.

These requirements are fulfilled only by the Jewish method.

Conclusions.—(1) Circumcision arose as a medical measure among an ancient Semitic race from whom the patriarch Abraham and the Israelites descended. (2) The primary object of the operation was not known or was forgotten by the races who subsequently adopted it. (3) It was, therefore, modified by each race so as to suit its own psychology. Thus the Arabs and some savage races shifted the operation to the age of puberty, and included it in their pre-nuptial ceremonies, so that the Arab word "Hatana" came to mean both "to marry" and "to circumcise." (4) Clitoridectomy is a result of the forgotten primary purpose of the operation. (5) The operation renders people less liable to certain diseases.

J. M. HURWITZ.

Pass List.

University of London.

1st Examination for Medical Degrees.

DECEMBER, 1922.

H. W. Applin.	J. M. Hulett.
K. C. Billingham.	D. F. Kanaar.
F. W. Bradley.	A. B. Kettle.
R. D. Broadway.	P. H. Loretz.
S. L. A. Clarke.	R. J. Milbank.
J. P. Evans.	C. B. Picken.
H. G. Floyd.	H. W. A. Post.
J. P. M. Fraulo.	N. Rosen.
C. Gross.	A. H. Russell.
E. C. H. Huddy.	C. G. D. Siggs.

Guy's Hospital

List of sums found in Ward Collecting Boxes, etc., and of Donations from Patients during the year 1922. The amounts received in the previous year are also given.

	Box Collections, 1922. £ s. d.	Patients' Contributions, 1922. £ s. d.	Totals for 1921. £ s. d.
Front Gate ...	17 12 8	—	11 7 9
Porters' Lodge ...	62 11 10	—	79 11 10
Out-Patient Dept.	85 2 2	47 9 2	118 0 9
Surgery	41 17 0	—	41 3 9
Dental Department	10 16 0	—	7 19 9
Light & Elect. Department ...	56 13 4	10 3 0	85 14 10
Massage Dept. ...	191 18 6	18 15 0	236 11 4
	£466 11 6	76 7 2	580 10 0
WARDS.			
Addison	4 4 8	332 8 10	225 14 11
Astley Cooper ...	3 0 6	329 4 0	306 14 0
Bright	4 0 7	38 17 0	51 12 7
Charity	4 13 6	389 14 6	411 18 4
Children's	4 12 4	27 9 0	17 1 2
Cornelius	1 4 3	249 2 3	214 10 2
Dorcas	5 1 4	502 7 7	556 18 9
Esther	4 9 9	262 9 6	286 0 7
Evelyn	2 1 9	242 18 0	175 19 11
Eye	3 19 11	365 18 2	476 13 6
Isolation	—	6 0 0	—
Job	6 10 3	367 9 0	376 15 8
Lazarus	1 17 4	207 1 6	279 9 5
Luke	4 5 4	353 17 6	308 9 2
Lydia	4 0 3	399 2 6	473 19 3
Martha	5 2 8	321 8 2	326 5 9
Mary	3 10 6	275 3 0	331 14 4
Naaman	2 12 8	308 13 6	352 15 3
Patience and Samaritan ...	1 5 4	97 17 5	212 16 7
Queen and Victoria	2 8 10	613 13 0	522 14 6
Stephen	5 3 7	307 11 6	272 10 7
Miscellaneous ...	—	77 11 6	96 3 6
	£540 16 10	6152 4 7	6857 7 11

TOTALS.	1922. £ s. d.	1921. £ s. d.
Box Collections	540 16 10	597 12 5
Patients' Contributions ...	6152 4 7	6259 15 6
	£6693 1 5	£6857 7 11

In addition to the above the following sums have been received from Patients in respect of Special Treatments during 1922 :—

	£ s. d.
Light Department ...	105 14 6
Massage Department ...	119 2 6

Guy's Hospital Medical School.

Students' Appointments.

January 16th—April 15th, 1923.

Clerks to Medical Units (First Three months).—(Dr. Beddard) Messrs. H. N. Collier, R. W. Cuningham, B. M. Francis, C. J. Froehlich, J. L. Groom, L. E. Houghton, H. Kessel, H. Moore, W. B. Norcott, S. M. Reeders, H. Van der Post, H. P. Yew; (Dr. Fawcett) Messrs. L. J. Barford, N. F. C. Burgess, G. Davies, R. W. Edwards, J. Evans, J. Gray, H. E. Harding, C. H. Highfield, T. R. Hill, J. W. Schollum, W. S. Whimster, H. G. Wimbush; (Dr. French) Messrs. M. Mc. C. Baird, E. Bowen-Jones, R. V. Cookes, D. C. Drake, G. R. Ford, J. R. B. Hern, A. E. Hill, J. Maingard, J. A. A. Mekelburg, F. C. Miller, S. R. G. Pimm, J. C. T. Tregarthen.

(Second Three Months).—(Dr. Fawcett) Messrs. I. M. Benjamin, A. H. Brockbank, M. M. El Mishad, D. R. Grant, D. S. Huskisson, H. C. Lee, R. R. Mackenzie, G. W. Murray, G. H. Pitt, W. G. Roberts, P. B. Skeels, W. D. Tresidder, L. A. S. Trott, R. G. Williams; (Dr. Beddard) Messrs. N. A. Arnold, P. C. Bennison, Ll. Davies, S. C. M. Davison, C. J. Dobbin, D. F. Johnstone, G. S. London, Howel Lewis, S. P. Meacock, C. F. Morrison, W. F. Roper, J. Sellick, J. D. S. Thoams, H. K. Williams, J. C. Young; (Dr. French) Messrs. J. H. Broadhead, M. F. Butler, F. R. Dingle, S. F. Durrans, M. H. Jacobs, R. M. Jones, J. G. Kingsbury, W. J. Montague, R. G. Nethery, I. P. Spurrell, P. G. Trafford, T. G. Tresidder, J. M. Van Schalkwijk, C. H. C. White, H. M. Worth.

Surgical Ward Clerks.—(Sir A. Fripp) Messrs. A. S. Gough, A. Simpson-Smith; (Mr. Steward) Messrs. C. B. Andreae, H. L. Peake; (Mr. Fagge) Messrs. I. C. P. Beauchamp, S. V. Strong; (Mr. Rowlands) Messrs. D. W. E. Lloyd, G. T. Hankey; (Mr. Turner) A. C. Lysaght; (Mr. Hughes) F. H. Pratt; (Mr. Davies-Colley) S. B. Browning; (Mr. Bromley) Graham-Davies; (Mr. Slesinger) C. P. Blacker.

Dressers to Surgical Units (Senior "A" Dressers).—(Sir A. Fripp) Messrs. P. R. T. Becker, L. F. Davies, G. A. Martin, R. Schofield, R. L. Waterfield, W. P. B. Winston; (Mr. Steward) Messrs. H. E. Blake, H. Levit, F. M. Newnham, J. E. Piercy, R. F. Smith, E. Sorabjee; (Mr. Fagge) Messrs. A. T. Fripp, T. M. Fripp, H. J. Fuller, A. I. Jowell, F. J. Levy, A. Tom; (Mr. Rowlands) Messrs. E. H. J. Berry, C. K. Colwill, R. A. Dyke, L. E. Houghton, W. A. Mill, B. G. Scholefield.

("B" Dressers).—H. P. F. Modder.

(Junior Dressers).—(Mr. Turner) Messrs. D. F. Durward, G. Dywen, B. E. Hawkins, A. W. Riddolls, R. H. El Sawy, H. J. Selby, D. A. Skan, W. K. Targett, J. G. S. Thomas, F. Widlake; (Mr. Hughes) Messrs. A. V. Clemmey, A. C. Hampson, J. L. Hopkins, J. U. Human, L. R. Jone, G. R. Ratcliffe, F. W. Schofield, J. W. Shackle, H. Trafford, T. I. Williams; (Mr. Davies-Colley) Messrs. L. Bechal, S. Berman, H. E. Filmer, T. D. Kellough, D. R. Martin, R. A. Norman, A. C. Taylor, E. C. Warner, C. L. Worthington; (Mr. Bromley) Messrs. P. C. Cumber, A. A. Dalby, L. Fisher, M. E. M. Jago, F. H. K. Knight, D. M. Lang, J. M. O'Rafferty, T. St. Silvester, H. H. Steadman; (Mr. Slesinger) Messrs. R. N. Brandwood, S. Cieman, A. B. Plant, F. A. Wilson.

Obstetric Dressers and Externs.—(Mr. Bellingham-Smith) Messrs. A. Canard, R. A. Grant, H. N. Hearle, S. P. Jacobson, J. S. Jacobsz, A. H. Jowell, O. F. A. Krause, J. J. Laws, J. J. Lewinstein, E. I. Liberman, F. Martin, R. D. Owen, F. H. G. Rowley, M. Rubenstein, E. C. Seward, C. H. C. Toussaint; (Mr. Chapple) Messrs. W. H. Bradley, P. S. Court, R. B. Fawkes, C. S. Hallpike, E. F. Hewlitt, W. S. Hunt, N. W. Mackeith, T. G. W. Parry, K. O. Parsons, R. E. Robinson, W. R. Spurrell, M. Taylor, H. C. Warner, H. J. W. J. Westlake.

Clerks in the Children's Department.—Messrs. E. N. C. Annis, J. B. Bell, D. H. Berry, W. H. Bradfield, L. W. Cann, R. J. Cann, R. S. Chambers, H. G. Close, J. C. G. Dickinson, A. S. M. Douglas, J. F. Goodenough, C. W. Greenway, R. D. Gross, J. C. Hewetson, G. C. Hughes, I. M. Hurwitz, C. Ive, R. E. Lane, S. A. Leader, R. R. Macintosh, H. Maclachlan, F. Marsh, O. G. Morris, L. E. Owen, W. F. Payne, M. B. Seng, D. S. Todd-White, I. R. Vermooten, J. L. Le C. Walker, E. Wornum, S. C. H. Worseldine, H. D. Wyse.

Dressers in the Eye, Ear, Nose and Throat Depts.—*Ophthalmology.*—(Mr. Eason) Messrs. T. S. Blacklidge, E. R. Boland, G. F. Gibberd, P. Mc. G. Moffatt, H. C. C. Taylor, D. Vaughan; (Mr. Ormond) Messrs. W. H. Craib, J. A. Currie, G. T. Henderson, J. Jemson, M. Killard-Leavey, G. C. Millis.

Laryngology.—(Mr. Mollison) W. H. Craib, J. A. Currie, G. T. Henderson, L. G. Housden, J. Jemson, G. C. Millis; (Mr. Layton) E. R. Boland, G. F. Gibberd, G. O. Mitchell, P. Mc. G. Moffatt, A. T. W. Powell, D. Vaughan.

Clerks in the Neurological Department.—Messrs. T. S. Blacklidge, A. Broido, N. L. Eckhoff, J. L. Faull, D. S. Hutchings, E. E. Neser, R. G. Tame, H. C. C. Taylor, M. Weinbren.

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Dressers in the Genito-Urinary Department.—Messrs. W. A. Caldwell, J. A. F. Denyssen, E. E. Neser.

Clerks in the Dermatological Department. — Messrs. D. H. Berry, L. W. Cann, R. J. Cann, R. S. Chambers, H. G. Close, A. S. M. Douglas, J. L. Faull, C. W. Greenway, R. D. Gross, J. C. Hewetson, G. C. Hughes, I. M. Hurwitz, C. Ive, R. E. Lane, R. R. Macintosh, H. Maclachlan, F. Marsh, G. O. Mitchell, L. E. Owen, A. F. Percy, M. B .Seng, I. R. Vermooten, J. L. Le C. Walker, M. Weinbren, H. J. F. Wood, S. C. H. Worseldine, H. D. Wyse.

Dressers in the Fracture Department.—Messrs. N. L. Eckhoff, D. B. Hitchings, E. Jones, C. E. Keast, T. Wooldridge.

Dressers in the Orthopædic Department.—Messrs. C. G. Bowen, A. Broido, S. H. Daneel, N. L. Eckhoff, I. E. Harries, D. B. Hitchings, R. M. Lloyd Still, T. Wooldridge.

Clinical Assistants.—Messrs. F. E. Graham-Bonnalie, N. L. Lloyd, M. Mitman, G. L. Shaw, G. M. Stoker, D. B. Whitlock.

Papers by Guy's Men.

Sir Charters Symonds, K.B.E., C.B., M.S. Gonorrhœal Stricture of the Rectum.—Proc. Roy. Soc. Med., xvi., Sec. of Surgery, p. 13.

Sir Arbuthnot Lane, Bart., C.B., M.S., F.R.C.S. The First and Last Kink.—*Practitioner*, cx., 1923, p. 33.

T. B. Layton, D.S.O., M.S. Submucous Lipoma in the Glassoepiglottic Furrows.—Proc. Roy. Soc. Med., xvi., Sec. of Laryngology, p. 11.

W. M. Mollison, M.Ch. Injury to the Nose from a Lift Accident.—*Ibid.*, p. 4.

G. Newton Pitt, M.D. The Changes in Medicine and its Methods in the past Forty-five Years.—*Ibid.*, Sec. of Medicine, *p.* 43.

John Ryle, M.D. On the Investigation of Dyspeptics. A British Medical Association Lecture.—*Brit. Med. Journ.*, 1923, i., p. 5.

R. P. Rowlands, M.S., F.R.C.S. Thoracic Surgery. War Lessons in Civil Practice.—*Lancet*, 1923, i., p. 16.

——. Case of Partial Gastrectomy for Cancer of the Stomach.—Proc .Roy. Soc. Med., xvi., Clinical Section, p. 2.

Alan H. Todd, M.S. Case of Mycloma of the Outer Condyle of the Femur, showing the Result of Bone-grafting.—*Ibid.*, p. 3.

Philip Turner, F.R.C.S. A Case of Intestinal Obstruction by a Meckel's Diverticulum in a Child.—*Clinical Journ.*, lii., 1923, p. 13.

Lectures and Demonstrations.

Ophthalmology.—Anatomical Theatre, Tuesdays at 4.15 p.m.

Surgical Pathology.—Museum, Mondays 5 p.m., and Thursdays 12 noon.

Medical Pathology.—Museum, Tuesdays 12 noon, and Fridays 4.30 p.m.

Practical Pharmacy.—Dispensary, Mondays and Thursdays at 3 p.m.

Pharmacology.—Pathological Theatre, Mondays 5 p.m. and Fridays 1.15 p.m.

Swimming Club.

Attention is drawn to the list on the Swimming Club Notice Board in the Colonnade. In view of the fact that our rivals for honours in the University and Inter-Hospital Water Polo and Swimming Cups are rather stronger this year it is essential that the Club put forward the strongest available teams. There will be one or two vacancies in the sides, and it is hoped that there will be keen competition to fill them. The Hon. Secretary will gladly give particulars of coaching classes in the "crawl," etc., held by Brickett in the Hospital Bath during the Summer Term. Members of the Committee are always ready to coach beginners at Water Polo.

Rugby Football Club.

NOTICE.

The attention of members, who ordered groups of the various teams of 1920—21 and 1921—22, is drawn to the notice on the board in the Colonnade, as it is desirable to dispose of the present stock as soon as possible.

All members of the "A" and Extra "A" XV.s should get as fit as possible in view of the Kent Cup-ties, which are being played on and after Wednesday, February 24th.

Publications Received.

St. Bartholomew's Hospital Journal, British Medical Journal, Indian Medical Record, Nursing Times, The Hospital Gazette, Current Researches in Anæsthesia and Analgesia, The Fight against Disease, Empire Exhibition News, Dental Record.

A Case of Urachal Cyst.

R. S., aged 52, was admitted under Mr. Thompson on the 12th October, 1922, complaining of frequency of micturition and a swelling in the hypogastrium. He gave a history of gonorrhœa 30 years ago, and had been treated for stricture 15 years ago at this hospital. Eight months ago the patient had difficulty in starting the act of micturition and frequency at night. He attended the Seamen's Hospital at Greenwich, where his stricture was dilated and his bladder was washed out. He improved in a few months and had no further treatment until June, 1922, when he attended Out-Patients here, complaining of frequency and of a discharge following micturition. At this time his urine contained pus and albumen in small quantities, and on rectal examination his prostate was found to be enlarged. A swelling was noted in the hypogastric area, but no urine was drawn off by catheterization. His swelling increased and his frequency now returned, so he was admitted for operation. He said he had been losing weight for the last three months.

On admission on the 12th October, 1922, he complained of a slight pain in the lower abdomen. There was nothing to suggest uræmia, and his pulse was 86, temperature 98·2°, and respirations 20. On abdominal examination there was a hard painless swelling in the hypogastrium, situated in the mid-line, absolutely symmetrical and reaching upwards as far as the umbilicus. On palpating this, it felt like a five months uterus, except that it was rather pointed towards the umbilicus.

On the 13th October, 1922, Mr. Thompson operated; the abdomen was opened in the mid-line from 1 inch below the umbo to 1 inch above the symphisis, and the peritoneum was carefully pushed upwards. When the wall of the tumour was exposed, it appeared whitish and avascular, not at all like the bladder wall.

The swelling was then incised, the abdominal cavity having been packed off with gauze, and a sticky gelatinous fluid of the consistence of thin treacle escaped—three pints of this were removed.

A catheter was passed per urethram, and was seen to enter the cyst through a funnel-shaped opening slightly to the left of the middle line. The cavity of the cyst extended down into the recto-vesical pouch, upwards to the umbilicus, and laterally as far as the mid-poupart lines.

It was decided to do no more, and the abdominal wall was partly closed, leaving a rubber tube with a gauze wick to drain the cyst.

The wound drained satisfactorily; at first thick mucoid urine, and later a slight amount of pus.

About ten days after the operation a swelling appeared in the ischio-rectal region which burst externally and discharged nearly a pint of pus. This progressed satisfactorily and healed entirely. At this time there was much pus in the urine.

The report on the chemical nature of the colloid material removed was "viscid mucus with a few cells."

The pathologist's report on a section of the cyst wall was "a colloid columnar celled carcinoma."

The man has recently been increasing in weight, and now only a very small supra-pubic fistula remains, which discharges a small amount of pus at intervals. He has all along passed his urine per urethram. He looks and feels very much better than when he was admitted to the ward.

Reviews.

Anæsthesia in Children. By C. Langton Hewer, M.B., B.S., M.R.C.S. (Messrs. H. K. Lewis & Co., Ltd., London.) Price 4s. 6d. net.

A small handbook, in clear type, well indexed, and with headings well marked.

The author is not dogmatic, but discusses, in a useful and clear manner, points and difficulties which may, and do arise during preparation and after-treatment of the child, and administration of anæsthetics to children. Much of the subject matter is equally applicable to anæsthetising adults.

With the general principles we are in agreement, but differ occasionally in what are matters of detail.

For instance, ethanesal, to which we have given considerable trial, we like, but we do not go quite so far as the author in its praise. The difference between it and a good ether is not so marked, we think, as he would have us believe.

The apparatus suggested for intra-tracheal insufflation of ether has the merit of being compact, but we do not like the absence of a safety mercury blow-off valve; also we prefer the ether supplied by air current rather than oxygen as a routine.

For spinal anæsthesia we much prefer the heavier stovaine-glucose solution, over which there is much more control in its extent of upward flow in producing analgesia.

These are questions, however, of personal experience and opinion. If the reader should differ in any particular, that should not alter the undoubted value of the book, particularly to those medical men who only occasionally are called upon to give anæsthetics.

Rugby Tour in France.

Extracts from the French Press.

"The weather was far from pleasant, but all the same many people were brought to the Parc des Princes by the match between the Stade Français and Guy's Hospital. The meeting of these two teams proved interesting, although the match resulted in a draw, each team scoring an unconverted try. The tactics of the game suffered at times from individual errors, especially so before half-time, but the public seemed appreciative of the energy and speed of the playing.

The Stade opened the play; soon after Bader, helped by one of his forwards, tried to get his threequarters in action, but the pass intended for Hue was not taken. The ball was dribbled by an English forward up to within 3 yards of the back line of the Stade, where it was blocked by Souillac. An open scrummage followed. Canciou was able to pick up the ball; he made a feint towards his threequarters, which deceived his adversaries, and was therefore able to score a try, which was not converted.

A series of attacks by passings from our visitors, and counter-attacks of the same nature by the Stadists followed. It then seemed as if the forwards wished to take a more important part in the game. Neither team now let the ball get to the back line. Under these conditions a few of the forwards, in trying to break away, frequently let the ball get into the hands of their opponents, thus making the game rather erratic.

Once this phase was over and the game became more open one could profitably compare the two teams. Guy's were the better because their halves combined much better, and as the superiority of heeling out was on the English side the offensive by passing was exclusively confined to our visitors. The Stade had to constantly reorganise their defence against the attacks of the English halves and threequarters. In that the Stade was fairly successful and succeeded so well that often they did not make it a fault to err against the rule of offside.

The English centres could not make much headway as they were so well marked that they were tackled as soon as they received the ball. One admired a few breakaways by Albertijn, which were accomplished by feints and swerves.

By two passes, which accompanied his attacks, the English Captain gave a good chance to his threequarter, Mostert. The latter was able to overcome Serre, but on each occasion he was marked down by Souillac near the base line of the Stade.

He was no capture on another occasion; when caught by Serre he executed, against his will, a herculean turning movement which he terminated in touch in a way which could not be envied by anyone.

Against all these offensives the Stadists did not lose any chance of counter-attacking. The Parisian forwards regained all the ground by vigorous dribbling into the English half and on getting there they tried to get their backs to work. One noticed that in throwing in from touch between certain Parisian forwards and Bader. During one of these manœuvres Bader threw to Hue and the latter worked so that he arrived, followed by Serre, in front of the English back, but Serre, as he received the ball, was marked by a Guy's man who thus saved his side.

The play started again. The English attacked by passes. Albertijn was not stopped by the feeble effort of Hue, but passed to Mostert, who missed a chance of scoring by not catching the ball.

The game then developed into attacks and counter-attacks. One of the Guy's threequarters missed a pass. The Stade forwards conducted a long dribble. Then an attack by passes very nearly took Hue to a try, but he was stopped in time. A moment after the check suffered by Hue, Bader, followed by one of his forwards, attacked the closed side of the English line and scored a try close to the touch line. It was not converted, which was a pity, as the ball, splendidly placed, only missed by hitting one of the posts. The English then attacked with their threequarters, but Van Schalkwijk came on too far and was tackled before he could pass to his three-quarter.

Soon after, a defective pass by Hue was caught by Albertijn, who ran a good way before giving a fol-

lowing kick, which was caught, but happily Roederer stopped the visitor who had caught it. Another time, in throwing in from touch Bader, trying to open up, saw his pass caught by an Englishman. Van Schalkwijk was therefore able to counter-attack up to 10 metres of the base line of the Stade.

Shortly after, a free kick penalised the Parisians whose back lines were out of play during a scrummage, but although the kick was well placed, the goal was missed

The Parisian side was still in a precarious position, and a good attack by a pass from the English threequarter developed. From the fact that Sageise only considered Van Schalkwijk when he came level with him, the right hand English centre, followed by the threeequarter Steyn, got as far as Souillac. He was then very well tackled, but his pass to his threequarter would surely have scored a try if, two metres from goal, Steyn had not missed the ball. In their turn the Parisions took the offensive, through several passes missed by their adversaries, and followed by a good counter-attack by Serre, and dribbling from his forwards they took the game into the English camp. Hue and Serre attacked in fine style, but without success, the English goal being menaced. Albertijn disengaged it by intercepting and passing to Mostert who, happily for the Stade, missed the ball.

The game thus ended.

The English team, superior in all its lines, dominated distinctly on the whole game. Therefore, notwithstanding a few strong reactions by their adversaries and the effectiveness of their defence, they should have won the match. To score such a success especially in the second half it would have been necessary that two of the threequarters relied a little more on the other two. Too confident in their ability, which was considerable, three times out of five they went too far into the Stadists lines to pass when that idea occurred to them. One must admit that Steyn and Mostert both missed a good chance to score. I am sure Steyn has not yet forgiven himself for missing a pass from Van Schalkwijk which would have allowed him to score a try the very minute he would have caught the ball. All the same the two centres were mistaken in not using more often Steyn and particularly Mostert, who showed themselves on several occasions quite capable of doing more than running in an undefended field. This mistake of the English centres only partly explains the semi check suffered by a team which had the monopoly of the offensive action.

The great effectiveness of the Stadist defence contributed considerably to a draw. We have said above that the Parisian defences were sometimes irregular, I do not think one can contest that, but one can admit that by their courage and energy the forwards of the Stade counteracted, during the whole of the game, the offensive efforts of our visitors, and as we are talking on this part we shall remark that the defence of the threequarters of the Stade was only fully effective when it blocked the offensive at its origin, otherwise the defence of Hue and Lageise was feeble it was thus that Albertijn got through Hue several times and Lageise seems to have mistaken his role for that of the judge of touch when during the second half he merely looked on at the course of the right English centre, who very nearly scored a try through his threequarter.

The English forwards dribbled very little, they tried to give nearly all their work to their threequarters. The threequarters, by their superior heeling out in closed and open scrummage, and their admirable disengaging of the ball for Bekker succeeded well. The Parisian players will do well to take this as an excellent lesson. It has been said that the English forwards were inferior at the touch ("à la touche"), but that is not my opinion. They were certainly not refined in play on certain occasions, such as combining passing with Bekker as was done by the Stadist forwards with Bader, but perhaps their play was just as efficacious as it did not give so many dangerous openings to their adversaries.

To resume, the English forwards seemed to have a better style, or rather a more modern style than that of the Stade, whose main feat was one of energy and endurance.

The two halves of Guy's combined nearly perfectly, they distinguished themselves from the French centres who passed their time looking for a combination which was only realised exceptionally.

Although Finnemore had a right to look for a pass from Bekker, he placed himself much nearer to the scrummage than do the French halves in similar circumstances, but it did not seem to stop him attacking or throwing well to his threequarters. There is much to be said for the tendency of our halves to place themselves too far from the scrummage.

The English threequarters played well, but I think they could have done better. Their passing was not always of an excellent character, and their passes were slow and a little too high, which is likely to hinder the speed of the offensive movements and make the defence much easier. The English threequarters were superior in their defence and disengagement from touch, and were incomparably better than their opponents.

The threequarters of the Stade attacked too rarely for one to judge their powers of offensive, but by certain of their starts I thought they had progressed since their victory over the Racing Club. In attack and in defence there is considerable room for improvement. Souillac, uneasy at the beginning of

the match, afterwards played admirably. He caught the ball several times in difficult positions and disengaged to follow perfectly. His defence was good against dribblings and rushes. Badenhorst was for his team a back who seemed quite sure of eternity during which he could play each stroke, but perhaps it was only an appearance, for the English back, notwithstanding ardour and speed of his adversaries, did not lose any occasion to help his side, which he did with the greatest of precision. He gave a very interesting proof of his "sang froid" when he marked a stopped volley during a dribbling of the Stadist forward. Unhappily the referee did not see this, and the English back got no profit out of his work except a few blows which are part of the small inconveniences of the role.

CHARLES GONDUIN.

The Stade Poitevin has kept in check Guy's Hospital, champion team of London and of England, last year! . . . Better still, it was victorious for some minutes, a performance to which the Stade Français did not attain, although the score was also a draw.

From the very beginning of the match Guy's showed themselves the stronger team. The Stade Poitevin organised at once a formidable defence. Our threequarters, by a speedy counter offensive, and a well balanced attack on the English back, got very near to goal, but a free kick quickly disengaged Guy's. Guy's then led, attacking with all its lines, and scored a try in the corner!

Following on—in scrummage we got the ball nine times out of ten. Jollet and Durand dribbled, and Durand succeeded in scoring a try, greeted with much applause.

Guy's 3; Stade 3, at half-time.

With the resumption of play the Stade showed up weaker, but Faivre and the threequarters kept well on their guard. For 15 minutes Guy's played in our "22" line, when Fautoux, disengaging from a scrummage, reached the "50" line, and kicking over the heads of the backs, allowed Blanched to dribble and score. Poitiers 6.

Guy's must, at all costs, save their reputation, and after ten minutes of superhuman efforts they scored a corner try. At the finish the score was unchanged.

Guy's brought to Poitiers the same team as to Paris and it is a very fast side at that, but I think that most of its strength is in its forwards. The threequarters, excellent in attack (although they are inclined to selfishness) are indolent in their defence. The back can only use his skill and kick, they do not always seem sure of these and lack speed.

Rugby.

GUY'S v. OLD MERCHANT TAYLORS.

The Hospital XV. commenced the latter half of the season in promising fashion by going to Teddington on January 6th and defeating the Taylors by 3 goals, one of which was dropped, and 2 tries, to one penalty goal. Reinforced by the return of Doherty, Taylor, Fouraker and Sprong, the forwards played a great game, and without crowing we were well on top of the home pack. True, they had not their International crack, R. Cove-Smith, playing, but for all that they pride themselves, and with every right too, on their strong and vigorous forwards. Bekker did not turn out, but Sprong made an able substitute, and with Albertijn playing standoff, the attacking line had to be re-arranged.

We were soon 2 tries to the good. Steyn was the first to score, and Hutchinson followed. One daily paper says that the latter "stole away" in dashing style. One quite agrees to this good player's dash, but it is difficult to imagine one of such build "stealing" for the line. Neser missed the first kick at goal and the second attempt at conversion, taken by Badenhorst, also failed. The Taylors' tackled manfully, and occasionally the ball got to their backs, but not much passing resulted. On the other hand, when our players got the ball, they were always dangerous, and much of the handling was remarkable. The ball was soon wet and difficult, but this appeared to make little difference. Finnemore, who shows plenty of dash, ran in with a try wide out, but Neser magnificently converted. The former was nearly in again, after excellent combination by Albertijn, Van Schalkwijk and Steyn, but a lusty tackle laid him low and then, just before the half-time interval, Albertijn neatly dropped a goal.

The Old Boys tackled so thoroughly during the second half that we had only one more try, and that a very fine one, scored by Sprong after a very lengthy run. Von Schalkwijk put the ball over the bar, and against us Cheesman placed a good penalty goal. This ended the scoring. The final total being as above. The game was played at an enormous pace, considering the recent rains, and both sides are to be congratulated on attaining such fitness so soon after Xmas. The Cup Ties will soon be on us and as each year we hold the Cup only whets the keenness of our rivals, it behoves all good Rugby men likely to play for our First or Second XV.'s to get fitter and fitter everyday; only by this means will the competitions be brought to a successful end and the Cups again put to repose in their resting place of the last three years.

Guy's Team.—W. Badenhorst, J. Finnemore, C. L. Steyn, J. G. Van Schalkwijk, R. Fellows-Smith, P. K. Albertijn, E. L. Sprong, W. D. Doherty, W. H. Taylor, E. E. Neser, E. H. Fouraker, B. G. Scholefield, N. M. Holloway, F. G. Hutchinson, G. Zondagh.

GUY'S v. R.A.F.

Following on their excellent win over the Old Merchant Taylors, Guy's met the Royal Air Force at Honor Oak Park on Wednesday, the 10th January. Our visitors are getting practice for the trio of interesting Service Competitions that have become an annual event between the Royal Navy, Army and Royal Air Force. It was a pitty C. N. Lowe was not able to play. Nothwithstanding his absence the Air Force had the assistance of W. W. Wakefield forward; also R. H. Usher and Simpson of the Harlequins. At half-back was Russell, who plays for Leicester. Many a tussle had he with Bekker, but one found his methods rather out of the ordinary. Once the ball was out of the Hospital men easily outpaced the opposing quartette. Van Schalkwijk showed extraordinary pace and played well all through. After Taylor, from a melée, had gained a try for Neser to convert, Sprong with one hand scooped the ball along for Van Schalkwijk to gather beautifully, and, on facing the full back, to send Albertijn in. Van Schalkwijk converted. Doherty was keeping his men well together, and with a helping wind the Airmen were pinned to their half. A lofty kick across by Steyn soon ended in Albertijn touching down, and, as the try was not converted, we held a lead of 13 points when ends were changed.

The Air Force had now the advantage of the breeze, and a hard game between two fine packs was witnessed. All our men played well, and it would not be fair to pick out anyone for special mention. Towards the end, the attacking party of Guy's again came into their own, and the pertinacity of Van Schalkwijk was rewarded. Following up his own kick at a rare pace he dispossessed Snaith of the ball and scored by the posts, to convert himself. Soon another try followed; Van Schalkwijk made a perfect opening, and Albertijn, taking the final pass, showed his heels and crossed the line. The play of Albertijn and his fellow centre Van Schalkwijk was splendid. Steyn did much useful kicking. He does not, apparently, trust his leg completely yet. Both halves played up to their great reputation, and Finnemore showed much dash and keenness. If this player is only shown that he is trusted and his confidence built up, he will make an excellent wing man. Score: Guy's, 3 goals 2 tries (21 points); R.A.F., nil.

Guy's Team.—W. Badenhorst, C. L. Steyn, P. K. Albertijn, J. G. Van Schalkwijk, J. Finnemore, F. Bekker, E. L. Sprong, W. H. Doherty, W. H. Taylor, E. E. Neser, E. H. Fouraker, N. M. Hollloway, G. Zondagh, G. G. Cameron, H. De Wet Vorster.

GUY'S v. BRISTOL.

The game at Honor Oak Park on Saturday, January 13th, was spoilt to some extent by the late arrival of the Bristol team. At the best of times a train reaching Paddington at 2 p.m. will scarcely give the players time to get to Honor Oak Park and change by 2.45, but with further delay on account of fog the game eventually did not start till 3.20. With the players chilled and the spectators half frozen neither the former could show their true form, nor could the latter work up much enthusiasm, the game, after a heavy ding-dong battle, ending in a pointless draw, a most unusual thing in Rugby Football. Added to this fact the game was without startling incidents so that detailed description is scarcely possible. Both sets of forwards were splendid and very evenly matched, though towards the end Bristol were strongest. This was probably accounted for by Fouraker having gone off with damaged ribs, thereby throwing extra pressure on the remaining seven. Pickles made a good shot at a penalty goal at an enormous distance from the posts. It was a splendid kick, only just missing the goal posts. Loose dribbles, hard scrummaging, and the keenest of tackling was the order all the first half.

The second half saw Albertijn try a drop at goal, and one good run by Spoors, of Bristol. Also, on our part Finnemore made a dash for the corner flag, after one splendid piece of passing by the threequarters. But defence by both teams was too much for the attack. Chantrill, the Bristol full back, played well indeed. He seems a very safe custodian and one almost wonders he has not been tried more in the official trial games. We saw a good duel between Albertijn and Van Schalkwijk and the Bristol centres, Corbett and Pickles. Doherty, Neser and Scholefield did well against Tucker and his men, and to have drawn with the conquerors of Cardiff was in itself an achievement only second to defeating them.

Guy's Team.—W. Badenhorst, J. Finnemore, J. G. Van Schalkwijk, P. K. Albertijn, C. L. Steyn, F. Bekker, E. L. Sprong, W. D. Doherty, E. E. Neser, F. G. Hutchinson, N. M. Holloway, G. Zondagh, B. G. Scholefield, E. H. Fouraker, H. De Wet Vorster.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

IN our issue of January 6th we published particulars of the Bermondsey and Rotherhithe War Memorial, together with a photograph of one of the tablets which has been erected near the Hospital Memorial. On Wednesday next, February 7th, at 3 p.m. H.H. Princess Victoria will visit the Hospital for the purpose of formally opening the new Children's Ward, the endowment of which comprises a great part of the Bermondsey and Rotherhithe War Memorial. Her Highness will be received by the Treasurer and Governors of the Hospital in the Court Room, where the Chairman of the War Memorial Committee will hand over in trust to the Governors the investments and title deeds of the property which form part of the endowment. Princess Victoria, accompanied by the Governors, will then proceed to the Children's Ward which she will declair open, after a dedication by the Bishop of Woolwich.

WE publish in this issue reproductions of the Address and Diploma presented to Dr. Edward Jenner by the Guy's Hospital Physical Society in February, 1802. As will be seen, the Address bears the signatures of over one hundred famous members of the Society at that period. The originals are exhibits in the Wellcome Historical Medical Museum in Wigmore Street. At the present time, following on the centenary of Jenner's death, there is an excellent display of articles connected in various ways with the discoverer of vaccination, and it will well repay those who are interested in medical antiquities to visit the Museum.

We must confess our inability to fathom the psychology of those who have seized on this occasion as an opportunity for renewing their attacks on vaccination. Before the universal adoption of Jenner's epoch-making discovery there were, in this country alone, 40,000 deaths per annum as a result of small-pox. Surely such figures, when contrasted with the present death-rate, should be sufficient for the most confirmed sceptic. In addition, as Sir William Hale-White stated in his address to the Royal Society of Medicine, "Jenner not only showed how to prevent this frightful malady so well that most doctors to-day have never seen a case of small-pox, but from his discovery followed the principle of vaccination which, for example, in the late war saved whole regiments of soldiers from typhoid fever."

THERE are some whose memories of the Physiological Theatre are restricted to one or two uproarious meetings which are usually held early in the spring. Here it is that each year the glories of Guy's are proclaimed anew, to the accompaniment of showers of paper from the gallery by certain enthusiasts whose main object seems to be the enticing of others to partake of as many enjoyments as possible for the modest sum of seven and sixpence. But there are others who, shunning the comforts of luxurious divans in the externs room regard the theatre as a peaceful haven of rest. Hither they may fly and dream pleasant dreams, lulled by the sonorous tones of a weary lecturer, and undisturbed by the turmoil of the world without. Even such disturbing thoughts as a decreased immunity to nursosis displayed by some of the resident staff, consequent upon the introduction of the new Theatre headgear, are dispelled for the moment. True, the humming of bees on some grassy slope would be the ideal. But in medicine what is of more value than suggestion?

To these dreamers, the change which the Physiological Theatre has just undergone will come as a pleasant surprise. It seems that they have, at long last, received some consideration. Even cushions have been supplied to increase their comfort! Still more, a stage has been built. Times there have been when some lecturer of meagre size was hidden behind his apparatus, but now indeed he will be open to the public gaze. Who knows but that in a few days we may see him shorn of all his glory and the tapestries of dignity. The time has come to see ourselves as others see us, and all is set for the production of "Shall We Join the Nurses?" This, the Residents' Play, will be produced in the Physiological Theatre on the nights of Wednesday, Thursday, and Friday next, February 7th, 8th, and 9th, at 8.15 p.m. The play itself will be preceded by a short pierrotic entertainment, also given by the Residents, for the purpose, we understand, of showing latecomers into their seats! If the production in any way resembles the demand for seats its success should be phenomenal. All seats in the body of the Theatre have already been allocated, and only the gallery remains to absorb the overflow. We hear that even the press representatives have been threatened with seats on the steps unless they are accompanied by members of the fairer sex! One can never tell what the next manœuvre in the fight against the neo-Malthusians will be!

We can still, however, hold out hopes for the great unseated. The dress rehearsal will take place on the evening of Tuesday, February 6th, at 8.15 p.m. Any men who have been unable to secure admission to the regular performance will be assured of a welcome on this evening.

THE usual notice issued by the United Hospitals Rugby Football Club, concerning the safety of the stands and certain other structures appertaining to the Richmond Athletic Ground, has again appeared. We regard its appearance as one of the sure signs that the Cup Competitions are about to commence, in much the same way as the newspaper correspondent regards the cuckoo as the harbinger of spring. In a few days, no doubt, the streets of London will be invaded by a yelling medley of Cup Team supporters, each doing his utmost to surpass the effects of previous years.

On page 48 we publish the list of fixtures for the first two rounds of the Hospital Rugby Cup. It will be seen that, owing to the withdrawal of Charing Cross Hospital, the Guy's team walk over into the semi-final, in

which we play St. Mary's, who beat St. George's on Thursday by 23 points to 8.

After so many absentees throughout the season owing to injury, it is pleasant to find the team once more at full strength. Great advances have lately been made by Bart.'s, whom we may well regard as our strongest rivals for the Cup. It naturally behoves every member of the first and the "A" teams to do his utmost to reach that standard of fitness which alone will carry him through a Cup match. We need not add that the teams can rely on that whole-hearted support, from the Hospital as a whole, which on such occasions is their due.

This afternoon the "A" team will be playing Catford Bridge, at Catford, in the semi-final of the Kent Cup, and we hope that as many supporters as possible will be ready on the touch line to urge them on to victory.

We regret to announce that the immediate publication of the latest edition of the "Directory of Guy's Men," notice of which was given in our last issue, has been unavoidably delayed owing to a binders' strike. It is hoped, however, that the Directory will be ready for publication in the course of the next few days.

All Guy's men, past and present, will hear, with the greatest regret, of the frightful accident which overtook Dr. A. H. Fison, Lecturer on Physics, on Wednesday afternoon. While attempting to fix a wireless aerial on the roof of the Medical School, Dr. Fison slipped and fell through a skylight into the Chemical Lecture Theatre. As the result of extensive injuries he had to undergo an operation the same evening, and is now lying seriously ill in Astley Cooper Ward. Our deepest sympathy is extended to him in his misfortune, and we earnestly look forward to his recovery.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Dear Sir,—The able and interesting article by Mr. Hurwitz in your last issue, resurrects a controversy which raged in your columns a few years ago, as to the utility of circumcision, which was described by more than one writer at that time as a useless mutilation.

That it is a substantial, though by no means a certain, prophylactic against syphilis and chancroids, is a fact which will be denied by few, if any, venereologists.

On theoretical grounds, and as a matter of clinical experience, the spirochæta pallida finds an easy point of entry in the moist and easily abraded skin off the prepuce.

The skin lining the inside of a long prepuce and the glans penis is altered and modified by its moist condition, so that it bears some resemblance to a mucous membrane and, in addition to its being more liable to cracks and abrasions, there is little doubt that it has less resistant power and is more vulnerable to germ invasions. The sodden epithelium provides ideal cultural conditions for a varied flora and the folded edge of the prepuce is peculiarly liable to cracks and abrasions, which readily become septic erosions.

This is often shown even in the course of legitimate marital intercourse.

That this condition can be altered entirely, is obvious in the dry skin of the circumcised penis which has been toughtened by exposure to friction against the clothes.

On the score of cleanliness, one must go to a man who has been circumcised in adult life for an out-and-out testimonial, and, without exception, I have never known such a man who was not delighted with the result of the operation for this reason alone, apart from other considerations.

To appreciate, however, the strongest reason for circumcision, one must look for the physiological function of the prepuce, which I have personally never seen mentioned, but which seems to be sufficiently clear.

The prepuce keeps the skin lining its inner surface and the glans, moist and hypersensitive and, by favouring the retention smegma, acts in the direction of irritation.

It contains some fibres of involuntary muscle which clutch the glans and, together with the irritation and its hypersensitive condition, provide a constant stimulation to the nerve centres connected with the sexual act.

This stimulation is unceasing, though usually more or less sub-conscious, and may be compared to the gradual charging of a Leyden Jar with electricity which, when full, will discharge itself.

Man, whether civilised or uncivilised, is subject to the law of Self Preservation and is immersed in a life-long struggle for existence, and the prepuce is a piece of mechanism created under the law of the Propagation of the Species, lest he should forget his sexual functions.

If this mechanical function of the prepuce is recognised and admitted, it constitutes the strongest reason in favour of circumcision to any civilised race and should obviously be practised in infancy to avoid precocious sexuality and masturbation, in addition to its strong claims on the score of hygiene and prophylaxis.—Yours truly,

A. ALLPORT.

9, Charles Street,
St. James's Square, S.W.
26th January, 1923.

DEAR SIR,—In your last number there is a case reported of a patient, aged 71, being admitted into Guy's and, it is stated, that at the operation she was found suffering from a perforated duodenal ulcer. In view of this, the following case may be of interest—

Mrs. L., aged 75.—On January 4th, 1923, she was taken ill with general abdominal pain, diarrhœa, and sickness. There were no definite physical signs and I treated her as a case of gastric influenza. She rapidly improved and when I saw her on January 10th at 6 p.m. her condition was practically normal. At 7 p.m. the same evening she suddenly complained of very severe abdominal pain all over the abdomen. This was accompanied by vomiting and rigors with profuse perspiration. The pain was so severe that she cried out and beat the wall with her hands. I saw her at 8 p.m. and found a marked change in her condition. The pain now was localised to the right side of the abdomen and there was a good deal of rigidity on this side. Temperature 98; pulse 80. An enema was given, but there was no result. At 9.30 p.m. her condition was worse. The rigidity was much more marked and she complained of great thirst. Temperature 98; pulse 88. The abdomen was very distended aand there was œdema of the anterior abdominal wall. Liver dulness present. Tongue furred with very little moisture. In view of the pain being chiefly in the right iliac fossa, I diagnosed an acute appendix with perforation and peritonitis. At 11 p.m. Mr. Slesinger saw her and decided that an immediate operation was necessary. The patient was given I.M.H. gr. 1/6, and was moved in an ambulance to a nursing home at 3, Courtfield Gardens. At 12.30 a.m. an operation was performed. Dr. Marston gave the anæsthetic. On opening the abdomen, Mr. Slesinger found an acute ulcer with perforation on the anterior wall of the duodenum just near the pylorus. The peritoneal cavity was filled with milky material and the intestines were very much congested. The hole was stitched up, a tube was put in the pelvis and the wound was closed. There was no trace of any malignant growth in the abdomen. The patient was put back to bed in the Fowler's position. Rectal saline and camphor injections were given throughout the night. The patient has made an uneventful recovery and is shortly going to a convalescent home.

This case presents rather remarkable features. Firstly, the age of the patient. I should very much like to know if there are any cases recorded of acute perforations above this age with subsequent recovery. Secondly, the suddenness of the onset with the complete absence of any previous history. Lastly, her unexpected recovery, when her condition seemed absolutely hopeless.—Yours very truly,

D. M. P. WHITCOMBE.

69, Queen's Gate,
S.W. 7.

"The Beggars' Dances."

1923—RECONSTRUCTION.

DEAR SIR,—The Beggars' Dances have incurred very serious losses on the last five dances, and now find themselves altogether devoid of funds and quite unable to carry on.

In view of the fact that certain moral obligations are due to the season-ticket holders, and thinking that it would be a very great pity if the dances were to come to a sudden end, a small syndicate of Guy's men has been formed with fresh capital, who, by arrangement with the previous management, intend to try and carry out the remainder of the programme with certain essential modifications. This arrangement is, for the moment, a purely temporary measure to enable the dance advertised for February 13th to be run. Who eventually will take over the management of the dances is not at present definitely settled. For the next dance, at anyrate, the general organisation is entirely vested by the syndicate in my hands, with Mr. N. H. Allen as secretary.

The price of tickets has necessarily been raised to 9s. per double, and the free buffet suspended. All refreshments will be supplied, however, at the lowest possible prices. The reason for this alteration is, that under the old arrangement, it was always necessary to overcrowd the hall to make the dance pay its way. No more than 85 tickets will be sold for the dance on February 13th, or any other dance under my control at the Suffolk Galleries.

It is hoped that this number will allow for a comfortable floor. Even at this figure the dances will remain at least 50 per cent. cheaper than any other dances run at the Suffolk Galleries.

An idea has arisen in the mind of a few men that the dances are run entirely as a profit-making concern. It should surely be obvious that this is not the case. The hall rent is £21 per dance, band, staff, licence, preparation, carriage, and certain trade expenses, amount to another £22, roughly another £13 is expended on food and drink.

A small mathematical sum will enable any doubting gentleman to realise that any profits made cannot be excessive! (They should remember that 5 per cent. of the *gross* takings on tickets is given to Guy's). It is surely clear that a very large sum has to be taken at the Bar even to cover the expenses.

As a matter of fact the dances since their conception have been run almost entirely with the idea of finding students cheap recreation, profits have always been a purely secondary consideration. If Guy's men appreciate this fact and wish the dances to continue, they will do their utmost to support them for the future both by introducing their friends and coming themselves. It is unlikely that any further dances will be run on the same basis after February 13th unless this dance is a success. Any further losses must result in the closure of the Beggars' Dances.

If possible the Bar prices will be reduced on February 13th and better spirits and wines will be supplied.

All whisky will (if obtainable) be pre-war strength. —I am Sir, Yours faithfully, for the Beggars' Dances 1923 Reconstruction,

ARCHIE S. M. DOUGLAS.

January 31st, 1923.

DEAR SIR,—I give you this for what it is worth. Years ago I was in practice at a seaport town in South Africa. In to my consulting room arrived a lady with a three weeks' old baby in her arms. She said to me, "Doctor I have a tumour in my stomach, would you mind examining me and give me your opinion of it?"

I, with all due precautions, i.e., having a nurse in attendance, proceeded to do so and came to the conclusion she was seven months pregnant. How could this be so with a three weeks old baby?

Well, to cut a long story short, in about two months time she was delivered of a fine male child.

The conundrum was solved. She, on her way from the Golden City, had got off the train and gone to a home for derelict children where she annexed baby No. 1. She was a drug taker and feared her baby would be born dead. Result the anxious father had two children.—Your truly,

R. E. G. PHILLIPS,
Capt., R.A.M.C.(Retd.)
Late Major South African Constabulary.

Oakfield,
Montgomery.
January 26th, 1923.

The Invention of Midwifery Forceps.

To purchase a bundle of old books at a sale is like buying a ticket in a lottery; both afford small chances of securing a prize. But when, recently, I saw the auctioneer's mallet quivering in the air, about to knock down a pile of dusty tomes for five shillings, I bid an extra shilling and secured the lot. On arriving home, I turned them over and had thrown them all but two into the waste-paper basket, when I saw I had, for once, drawn a prize. I had secured, in fair condition, Dr. Hugh Chamberlen's translation of a French medical book entitled, "The Diseases of Women with Child." The title page is unfortunately missing, but internal evidence tells me that it was printed in London in 1672. At this time Louis XIV. was firmly seated on the throne of France and the author points his remarks as to the possibility that sterile women may later become fruitful, by reference to the late age at which the mother of the *Roi Soleil* bore her distinguished son.

"We have had a remarkable example in the person of the Queen-Mother who was about two and twenty years married, without children, and yet afterwards, to the great joy and content of all France, she had our invincible Monarch, Lewis the 14th, now reigning, to whom God grant a long and happy life."

In these happy days the hanging of women seems to have caused no discussion for the author controverting the statement of Ambrose Paré, that (in the case of a woman who was executed fourteen days after a normal labour)—

"He found (as he saith) the *os pubis* separated in the middle the breadth of half-a-finger and the *ossa illia* themselves disjoynted from the *os sacrum*."

Struggling between his natural incredulity and his respect for Paré, he goes on to say:—

"I will not in this case accuse him of imposture, for I have too much respect for him and esteem him too sincere for it; but I indeed believe he was mistaken in this separation. . . . for then they should have been obliged to carry this Woman to Execution; for she would not have been able to climb the Ladder of the Gibbet and to keep herself

on her legs, according to the custom of other Malefactors; because the Body is only supported by the stability of these bones——"

The book is illustrated with curious wood-cuts and I regret to see, in one of them, the accoucheur has taken a good grip on the cord, by twisting it round his hand, preparatory to dragging out the placenta, although the author wisely adds that:—

"It must not be drawn forth with too much violence lest the Womb, to which this Burthen is sometimes strongly fastened, be drawn down with it, as hath been done to some that I know. . . ."

He goes on to give some practical suggestions as to how the patient herself may aid in expelling the afterbirth:—

"The Woman may blow strongly into her Hands shut, just as one would into the mouth of a Bottle to know whether it be broke; or she may put her finger in her Throat, as if she would excite vomiting. . . . ."

But perhaps the real interest in the book lies in the Preface, where the translator, after condemning the "fastening of Hooks in the Head of a Child in a difficult Labour," goes on to say:—

"I can by no means approve of that practice; because my Father, Brothers, and myself (though none else in Europe that I know) have by God's blessing, and our industry, attained to, and long practised a way to deliver a Woman in this case without any prejudice to her or her Infant. By this manuell operation we can also both shorten the time, and lessen the number of pains in a right Labour, without danger and with advantage to both Woman and Child."

It is obvious that our colleague is here referring to the introduction of forceps, the use of which for a long time remained the monopoly of the Chamberlen family. Dr. Hugh Chamberlen by no means betrays the secret and we can read his excuse for not doing so in his Preface:—

"I will now take leave to offer an Apology for not publishing the secret I mention we have to extract children without Hooks, where other Artists use them. I cannot esteem it my own to dispose of, nor publish it without injury to my Family. . . ."

But no one will imagine that the Chamberlens actually discovered the forceps; instruments of this nature have, I believe, been found amongst the ruins of Pompeii, and doubtless the teeming millions of Egypt and Assyria used a similar contrivance for the benefit of women in the throes of difficult labour.

ERNEST H. GRIFFIN.

Appointment.

Alan McKenzie, Second Medical Officer to the Islands under the Cook Islands Administration.

A Warning to "Doctors."

A new menace to the peace of mind of kind-hearted students has arisen, a human vulture, that preys on their good nature. It's habitat is Maze Pond, it is short of stature, has a brown trilby crest, a large, flattened beak and a characteristic "bitter" odour. It's method of attack is as follows:—Swooping down on it's victim, it will raise it's crest, seize and worry an unoccupied hand and give vent to a low, husky, chattering, such as, "Hullo, Doctor, you remember me, don't you? I was in Addison Ward. Are you going for a holiday? You need it. You work so hard. Can you find me a job, doctor? Haven't any work to do—got pneumonia—wife and children—chest very bad—no shelter in damp weather, etc., etc.", and by that time he has usually got another feather for his nest and makes off. Be warned in time; do not encourage this monster. A few well-chosen words, which will come to you on the spur of the moment, will drive him away and gradually he will leave the neighbourhood. He had at least two victims last week and is not a deserving charity.

Change of Address.

Alan McKenzie, Raratonga, Cook Islands, Eastern Pacific.

Dr. Oswald Marriott, 32, Stafford Road, Waddon, Croydon.

L. W. Marshall, C.M.G., J.P., Drake House, Malvern Road, Cheltenham (Phone, 205).

Papers by Guy's Men.

Sir W. Arbuthnot Lane, Bart., M.S., F.R.C.S. Some Notes on the Treatment of Fractures.—*Lancet*, 1923, i., p. 162.

Arthur F. Hurst, M.D., F.R.C.P. An Address on Achlorhydria: Its Relation to Pernicious Anæmia and other Diseases.—*Ibid.*, p. 111.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Pneumococcal Infections in Childhood.

CLINICAL LECTURE BY H. C. CAMERON, M.D.

GENTLEMEN,—In text books of medicine there is usually no systematic description under a single heading of the effects immediate and remote of infection of the blood stream by the pneumococcus. Lobar pneumonia is often dealt with under the heading of respiratory diseases, while elsewhere there are scattered paragrapns devoted to the consideration of pneumococcal peritonitis, pneumococcal meningitis or pneumococcal arthritis. So far as the infection concerns children I think it may be helpful to attempt some description of this specific infectious disease and to emphasise the features which all pneumococcal inflammation shows no matter where it may be situated in the body. For the purpose of this lecture let me speak of pneumonic fever, by which I mean the invasion of the blood stream by the pneumococcus and commonly by inflammation of the lung or of some other part of the body, the pleura, the pericardium, the peritoneum, the middle ear, the pia mater, the epiphyses of the long bones, etc.

Similarly we speak of and regard rheumatic fever as a specific infectious disease, although the infective agent remains doubtful, characterised by the same tendency to metastasis of infection to the joints, to the endocardium, myocardium, pericardium and to the brain in the rheumatic encephalitis of chorea, and I do not think it can be doubted that the conception of rheumatic infection as a whole has gained in clearness and precision by according this treatment to it. The complex picture of rheumatism as it affects children we owe to the insistence of the English physicians, Cheadle and others, in the letter part of the last century.

Rheumatic fever appears to arise autogenously by infection from organisms which are harboured in some part of the individual's body, so that the evidence of contagion is lacking. Pneumonic fever on the other hand, though in general nursed without special isolation, is contracted from contact with patients who have the disease, from convalescents and from carriers. In this connection the recent work at the Rockefeller Institute is of interest. Of the four types of pneumococci isolated, one only, Type IV., is a normal inhabitant of human mouths. Eighty per cent of cases of pneumonia are due to one or other of the other three types which are virulent diplococci of invasion. Only 20 per cent. of the cases were due to autogenous infection by Type IV. Moreover it was found that cases due to Type IV. were in general mild and that in cases due to the other three types after recovery the virulent invading organisms disappeared leaving only the normal inhabitants belonging to Type IV. Pneumonic fever is therefore, in the main, a contagious disease. On the other hand it resembles rheumatic fever, perhaps because some part is due to autogenous infection, in the tendency to relapse. No other acute disease recurs in the same individual with such frequency. Instances where ten or even twenty separate attacks have been survived are not unknown.

The symptoms which follow upon the infection of the blood stream are severe. There is often in adults an initial rigor, in infants an initial convulsion. The temperature is sustained at a steady high level, the breathing is ample and stimulated, the pulse rapid and strong, the skin hot and dry. There is a strongly marked polynuclear leucocytosis. The evidence of toxæmia is very clear; delirium is the rule, the flushed face is fixed and expressionless, and there may be restlessness or stupor. In infants and young children the disease may be fatal at this early stage of invasion because of the violence of the reaction. Death may then occur, usually with hyperpyrexia or convulsions. After this stage of violent invasion there follows a period of varying duration during which the symptoms, if less severe than at the outset, are maintained at a steady high level. Sooner or later evidence of the involvement of one or other of the sites prone to pneumococcal infection begins to appear. It is characteristic of the common form of lobar pneumonia of adults and older childern that this evidence of consolidation of the lung appears early, often on the third day after the invasion. On the other hand, in the acute primary pneumonia of the first two years of life the signs of consolidation are often delayed while in affection of meninges, pleura, pericardium, peritoneum, a long time may elapse before physical examination succeeds in identifying the site of this secondary infection. In a few cases no such secondary infection occurs or

at least none which can be determined clinically. The disease remains a pneumococcal septicæmia without local infection. Ultimately the infection of the blood stream comes to an end and the patient emerges, sometimes with great suddenness, from the condition of severe toxæmia. In the typical lobar pneumonia this recovery is sudden, by crisis, and in general the stage of acute infection is short. Between the seventh and the tenth day we may hope for and expect this crisis. Unhappily in the pneumococcal infections of little children the termination of the acute infective process is apt to be long delayed, and the pneumonic fever, as such, may last for many weeks.

It is this persistence of the infection which accounts for the very high mortality of the disease in the first two years of life, when perhaps 50 to 60 per cent. of all children affected may die.

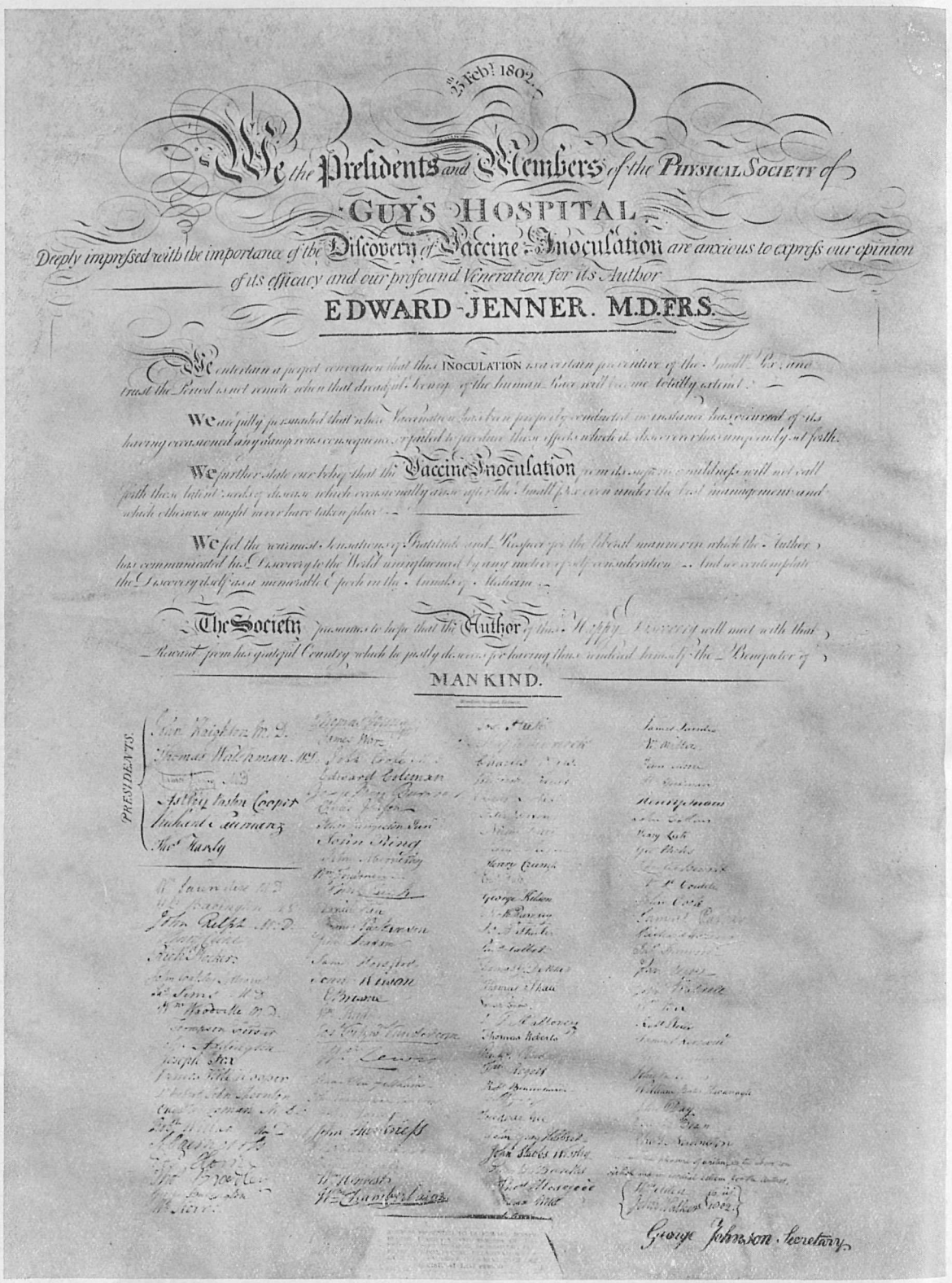
After recovery from the acute pneumonic fever, in a proportion of cases, there is still the risk to be overcome, provided by the persistence in one situation or another of a local suppurative inflammation. In children these localised residual collections of pus are much more common than in adults. Not only is empyema much more frequently found, but suppuration is found not very rarely in other sites. Empyema, which is bilateral, pyopericardium, suppurative peritonitis, suppurative arthritis are sequelæ of extreme rarity in adults and older children. In the first two years of life the possibility of their presence is always to be kept in mind.

The presence of these localised residual abscesses no doubt adds further to the already high mortality. Nevertheless it has to be emphasised that a fatal ending is, in the vast majority of cases, due to the persistence of the pneumonic fever as such, and that when the residual abscess is truly metapneumonic the further mortality is surprisingly small.

Let us consider in turn the clinical features of the pneumococcal infection in various situations which accompanies pneumonic fever.

Pneumonia.—Under two years of age the common form of pneumococcal infection of the lung differs from that found in adults and later childhood. In a number of cases, perhaps in 25 per cent. of the whole, the symptoms are sufficiently like those found in adults to warrant their being classed as cases of lobar pneumonia, a short course terminating by crisis, with early evidence of consolidation of a part of the lung while the rest remains comparatively unaffected and with an absence of coincident bronchial catarrh. In nearly all cases, however, in the first year of life and in most of those encountered in the second year the course tends to be much longer, the consolidation is scattered throughout the lung and there is evidence of an accompanying catarrh both of the bronchi and alveoli. In the post-mortem room the lobar distribution often predominates and histological examination shows evidence that the consolidation is due as much to the accumulation of catarrhal products as to the outpouring of fibrin. The mortality reaches a very high figure, perhaps 50 per cent. in the second year and 70 per cent. in the first. In the third year a sudden change in the type of pneumonia commonly encountered appears. Thereafter lobar pneumonia of adult type is the rule and the mortality falls to a very low figure, probably less that 10 per cent., if we exclude cases secondary to measles and whooping cough. How much of the pneumonic fever of infants and young children is secondary to influenza is doubtful. I suspect a great deal.

Empyema.—As has been said, empyema as a sequel to pneumonic fever is more common in early childhood than at any time of life. The abscess cavity tends to be small, sometimes situated apically or between the lobes of the lungs. Sometimes more than one abscess is present. These features clearly militate against successful diagnosis and against successful treatment. Cases under one year seldom recover. At Guy's no case under one year survived during the ten years 1910—1919. Under two years, of 52 cases, 39 died, and only 13 recovered. Examination of the records of these cases shows one interesting point very clearly. All the cases which recovered were metapneumonic. I mean by that that the pneumonic fever as such was over and the children presented themselves complaining only of a failure to thrive, of wasting, of anæmia, of diarrhœa, or, vaguely, of an unsatisfactory convalescence from a pneumonia some months before. In every case of recovery the temperature curve before operation showed either a normal temperature or a trifling irregularity. Severe toxæmia, dyspnœa of great urgency, rapid pulse, delirium, somnolence, etc., the symptoms of a persisting pneumonic fever,



25th Feby 1802.

We the Presidents and Members of the PHYSICAL SOCIETY of

GUY'S HOSPITAL

Deeply impressed with the importance of the Discovery of Vaccine Inoculation are anxious to express our opinion of its efficacy and our profound Veneration for its Author

EDWARD JENNER. M.D.F.R.S.

We entertain a perfect conviction that this INOCULATION is a certain preventive of the Small Pox, and trust the Period is not remote when that dreadful Scourge of the human Race will become totally extinct.

We are fully persuaded that where Vaccination has been properly conducted no instance has occurred of its having occasioned any dangerous consequence or failed to produce those effects which its discoverer has uniformly set forth.

We further state our belief that the Vaccine Inoculation from its superior mildness will not call forth those latent seeds of disease which occasionally arise after the Small Pox even under the best management and which otherwise might never have taken place.

We feel the warmest Sensations of Gratitude and Respect for the liberal manner in which the Author has communicated his Discovery to the World uninfluenced by any motive of self consideration. And we contemplate the Discovery itself as a memorable Epoch in the Annals of Medicine.

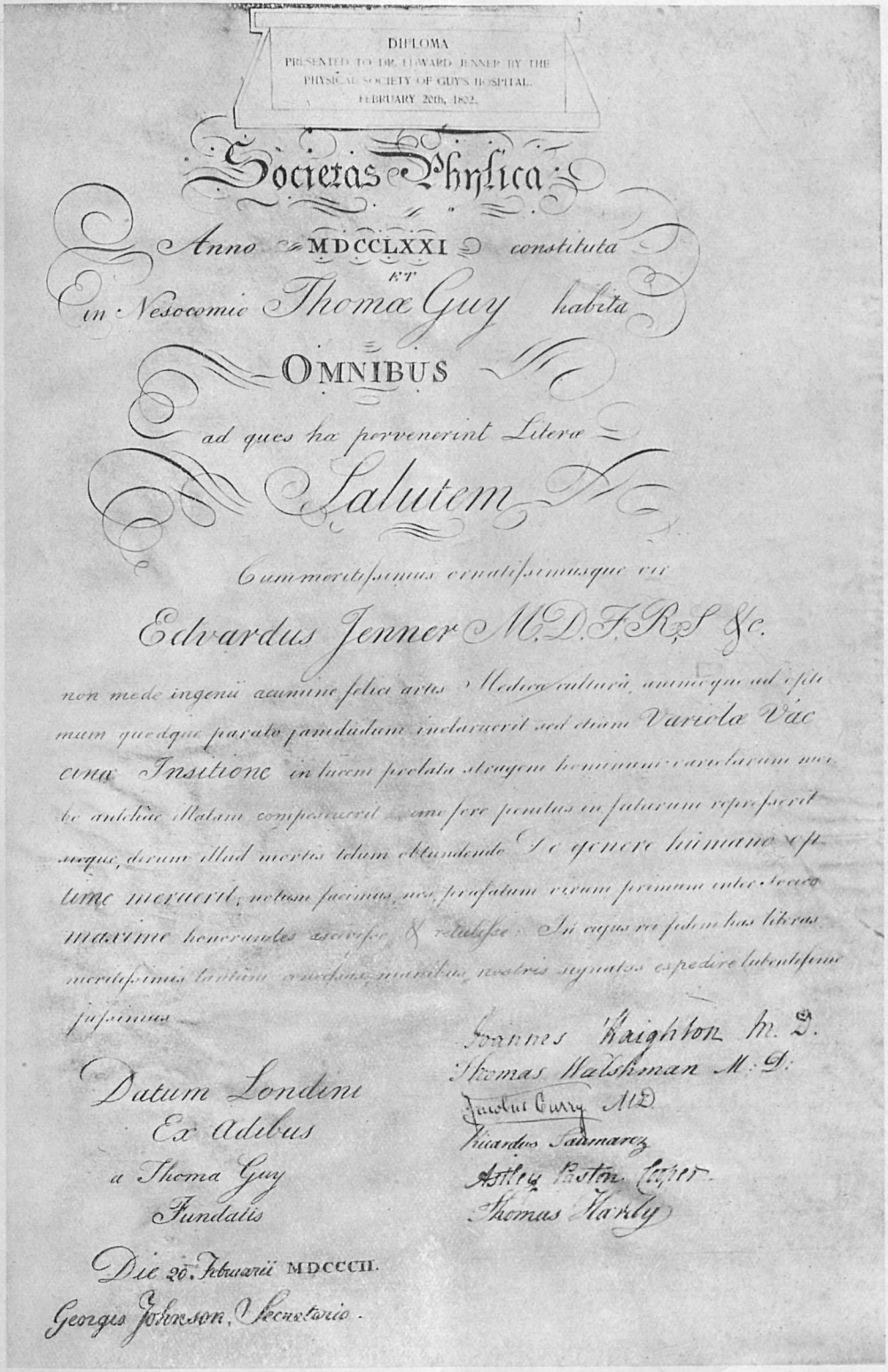
The Society presumes to hope that the Author of this Happy Discovery will meet with that Reward from his grateful Country which he justly deserves for having thus rendered himself the Benefactor of

MANKIND.

PRESIDENTS.

George Johnson Secretary.

Address presented to Dr. EDWARD JENNER by the Presidents and Members of the Physical Society of Guy's Hospital, February 25th, 1802, bearing the signatures of over one hundred famous members of the Society at that period.



DIPLOMA
PRESENTED TO DR. EDWARD JENNER BY THE
PHYSICAL SOCIETY OF GUY'S HOSPITAL.
FEBRUARY 20th, 1802.

Societas Physica

Anno MDCCLXXI constituta
ET
in Nesocomio Thomæ Guy habita

OMNIBUS

ad quos hæ pervenerint Literæ

Salutem

Cum meritissimus ornatissimusque vir

Edvardus Jenner M.D.F.R.S. &c.

non mede ingenii acumine felici artis Medicæ cultura, animoque ad optimum quodque parato jamdudum inclaruerit sed etiam Variolæ Vaccinæ Insitione in lucem prolata stragem hominum variolarum morbo antehac illatam compescuerit, imo fere penitus in futurum repressserit, sicque, dirum illud mortis telum obtundendo De genere humano optime meruerit, notum facimus, nos, præfatum virum primum inter Socios maxime honorandos ascivisse & retulisse. In cujus rei fidem has literas meritissimis tantum concessas manibus nostris signatas expedire lubentissime jussimus.

Datum Londini
Ex Adibus
a Thoma Guy
Fundatis

Die 20. Februarii MDCCCII.

Georgio Johnson, Secretario.

Joannes Haighton M.D.
Thomas Walshman M.D.
Jacobus Curry M.D.
Ricardus Saumarez
Astley Paston Cooper
Thomas Hardy

Diploma presented to Dr. EDWARD JENNER by the Physical Society of Guy's Hospital, February 20th, 1802.

were absent. It is interesting to note that every case in which the pneumonia as such was at an end and which showed only the residual empyema recovered, while of 40 cases which showed the continued presence of the pneumonic fever only one recovered. In older children and adults it is always a favourable indication when the temperature rise due to the empyema follows upon the pyrexia of the pneumonic fever after an interval. Such cases of metapneumonic empyema make a rapid recovery. In the first two years of life, however, the curve of pyrexia due to the empyema is apt to be superimposed upon and coincide with the curve due to the pneumonic fever which has not yet terminated. This difficulty is a consequence of the much longer course of the pneumonic fever in the first two years of life. In the third year the mortality of empyema falls from about 70 per cent. to perhaps to 10 per cent. or even less, because the type of pneumonia then changes to the adult variety.

Further, the figures which I obtained show that in 20 cases children under two years of age were submitted to the radical operation for removal of rib while there was evidence that the pneumonic fever was still active. Death followed in all but one. In ten instances the child died within twenty-four hours of the operation. It is clear that the radical operation must not be performed during the pneumonic fever. As a treatment of metapneumonic empyema, on the other hand, it gives results in infants which are as satisfactory as in adults. The difficulty is due to the rarity of the metapneumonic type of empyema. All the fatal cases, in the post-mortem room, showed either persisting bronchopneumonia, pericarditis or meningitis. A fatal result must be expected except in the case of those children who present themselves with a residual empyema, or who survive the pneumonic fever. If pus accumulates in sympneumonic cases, aspiration performed without anæsthesia is the treatment indicated.

Pneumococcal Peritonitis.—In children, and especially in little girls, one of the most common of the aberrant forms of pneumococcal infection is that in which the peritoneum is involved.

Pneumococcal peritonitis is by no means a rare disease. Between 1903 and 1911 at least twenty-four cases have been admitted to Guy's Hospital in which the diagnosis has been confirmed by bacteriological examination. In many cases which might otherwise have been included no bacteriological examination was made, and I have no doubt that the disease is much commoner than is suggested by these figures. Rischbieth, in 1911, in an interesting paper* was able to report a series of fifty-seven cases in children from the Great Ormond Street Hospital for Sick Children and from the London Hospital, in about half of which a bacteriological examination was made. Many very large series of cases have been published on the continent.

That the number of cases appearing in the records of hospitals is smaller than the commonness of the disease warrants is no doubt due to the considerable difficulties which the diagnosis has presented. The disease may come under observation at various stages and with very different symptoms, so that it may simulate closely such diverse conditions as typhoid fever, acute gastro-enteritis, appendicitis, and tuberculous peritonitis.

If, as I believe, there are many cases of pneumococcal peritonitis in which it is unwise to perform immediate laparotomy, it becomes necessary that we should be able promptly to distinguish pneumococcal peritonitis from peritonitis due to other causes, and especially from peritonitis due to appendicitis.

Very little attention is paid to this differential diagnosis in text-books of medicine and of the diseases of children, and there is, I believe a tendency to regard the mistaken diagnosis as inevitable, and to look upon pneumococcal peritonitis as a condition which is only disclosed when at a laparotomy the appendix, which was about to be removed, is found to be normal. I think that a closer study of the symptomatology will render the similarity between pneumococcal peritonitis—a condition of general septicæmia culminating in diffuse infection of the whole peritoneal cavity—and appendicitis—a local inflammation without septicæmia—much less apparent.

In childhood the only common forms of peritonitis besides pneumococcal peritonitis may be said to be those due to appendicitis, to gonorrhœal infection, and to streptococcal infection.

Gonorrhœal infection may be readily detected by an examination of the vagina and vulva

* Quart. Journ. Med., Oxford, 1911, iv., pp. 205—231.

and by a bacteriological examination of the discharges.

So-called "primary" streptococcal peritonitis is rare, but can hardly be distinguished from that due to the pneumococcus. In both it is commonly a complication of septicæmia. It results sometimes from infection of the umbilical cord in the newly born; occasionally it follows scarlet fever or terminates chronic nephritis. Rarely it complicates erysipelas in young infants, when it may be associated with œdema of the lower extremities. Such infections of the peritoneum are probably always fatal.

In early life, peritonitis due to infection of the urinary or biliary passages, to suppuration in a mesenteric or retroperitoneal gland, to perforation in typhoid fever, or to perforation of a gastric or duodenal ulcer, is so rare that it may almost be excluded from consideration.

The diagnosis between peritonitis due to appendicitis and peritonitis due to pneumococcal infection depends upon the evidence in the latter condition of the presence of a septicæmia. This shows itself in the feeling which we often have when we stand by the side of a case of pneumococcal peritonitis, that the patient is, in general, more ill than can be accounted for by the degree of peritonitis present.

Often there is evidence of infection in other parts, either antecedent or simultaneous, so that it may be possible to say with certainty that in addition to peritonitis there are other infections present such as pericarditis, pleurisy or pneumonia. In such cases of multiple localisation the prognosis is undoubtedly more serious. Of the Guy's Hospital cases only one recovered.

Even when there is no evidence of the involvement of lung and pleura, the aspect of the patient is often that familiar in pneumonia, with grunting respiration and alæ nasi working vigorously. In five of the Guy's cases herpes labialis was present; in others the onset was with rigors, shivering or convulsions. Where a leucocyte count was made high leucocytosis was present. An early and copious exudation of lymph is characteristic, and in several of the Guy's cases it is noted that soon after the onset of symptoms of peritonitis the signs of free fluid in the peritoneal cavity were apparent. The temperature, within a few hours of the onset of severe abdominal pain and vomiting, was about 104° F.

From a consideration of these points the age and sex, the onset with rigors, convulsions or herpes labialis, the early appearance of delirium or of pronounced diarrhœa, the simultaneous presence of pleurisy, pericarditis or pneumonia, the history of repeated attacks of lobar pneumonia, the evidence of antecedent colitis, the great and rapid exudation of fluid into the peritoneal cavity, the high temperature at the onset, the marked leucocytosis, the want of localisation of pain and rigidity to the right iliac fossa, it is often possible to make a diagnosis with certainty between appendicitis and pneumococcal peritonitis.

In pneumococcal peritonitis it is possible to recognise three stages:

(1) A stage of onset, in which all the symptoms set in with great violence, and in which, in many cases, death occurs. In cases seen at this stage the diagnosis is to be made from perforative peritonitis or from acute gastro-enteritis. In many cases there is truly an enteritis present as well as the septicæmia, but the leucocytosis and the height of the temperature should serve to distinguish the double condition from one of uncomplicated gastro-enteritis.

(2) If the patient survives the onset, after some hours or days there is usually considerable improvement in the general condition, and a retrogression of all symptoms. The pyrexia usually continues for some two or three weeks, during which time a diagnosis of typhoid fever may be suggested. The greater intensity of the abdominal pain, the persistent vomiting, the high leucocytosis, and the presence, in some cases, of evidence of free fluid in the abdominal cavity, should prevent this mistake.

(3) Lastly, after recovery from the pneumonic fever, a residual collection of pus—often subdiaphragmatic, sometimes, however, filling the whole peritoneal cavity—is usually left behind, just as an empyema may complicate convalescence from lobar pneumonia. Such a condition seen for the first time is likely to be mistaken for a case of tuberculous peritonitis with local or general effusion. Moreover, the pneumococcal abscess tends, like that due to tuberculous peritonitis, to point near the umbilicus. It would seem, however, that when such an umbilical fistula appears after pneumococcal peritonitis, it may be formed with

much greater rapidity than is common in tuberculous peritonitis.

I have notes of six patients who were admitted with such residual collections of pus in the abdominal cavity after recovery from the pneumococcal septicæmia in their own homes. One of these was an adult, the remaining three children.

The treatment of pneumococcal peritonitis commonly advised is by immediate laparotomy and the establishment of drainage. Against this procedure as an invariable practice I would urge the following objections:—

(1) In pneumococcal peritonitis there exists no focus of infection which can be extirpated as in appendicitis. In those cases in which there is an acute local enteritis—and they appear to be relatively uncommon—the condition of the gut is not such as to encourage attempts at excision.

(2) The peritonitis is always in the first instance a diffuse general peritonitis involving the whole peritoneal cavity to its furthest recesses. Such a general infection renders efficient drainage almost an impossibility.

(3) It is by no means certain, even if it were possible to drain off the exuded lymph, that it is wise immediately to attempt to do so. The lymph not improbably has a protective function and diminishes the absorption of toxins. In what I have called the second stage of the illness, which coincides with the copious exudation of lymph, there is often in favourable cases an amelioration of all toxæmic symptoms.

(4) The disease in the early stages is essentially a septicæmia, and the danger is in proportion to the virulence of the general infection. Death may occur within a few hours of the time at which the local infection of the peritoneum takes place and while the peritoneum itself is involved to but a small extent.

(5) In some instances, as we have seen, patients have been allowed to survive the acute peritonitis and the septicæmia in their own homes without operative interference, and have presented themselves with a residual abscess, usually subdiaphragmatic, drainage of which has been followed by a complete recovery. In these cases the diagnosis has commonly been in the early stage that of appendicitis, or pneumonia, or typhoid fever; in a later stage tuberculous peritonitis is simulated. To compare with these I examined the results of immediate laparotomy at Guy's Hospital. Eight cases admitted in the acute stage, for one reason or another, were not operated on before death. In seven of these, pleurisy, pneumonia, peritonitis, or endocarditis or a combination of these were present as well as peritonitis. The eighth case died as soon as admitted. Twelve cases were immediately submitted to laparotomy. Nine of these died, four on the day following operation, the remainder within a few days. Three cases recovered, but in none is it possible to trace any immediate benefit from the operation. All passed through a long and tedious illness, marked by a persistent high temperature and rapid pulse, developed in convalescence the signs of abdominal abscess, and only recovered after a second operation by which the pus was evacuated. No case recovered as a result of immediate laparotomy without the formation of residual abscesses and without the necessity for a second operation. Such a clinical course presents a close analogy with the train of events in pneumococcal septicæmia with the more usual localisation in the lung followed by an empyema. The figures from which I quote were collected ten years ago, but I have seen nothing since to make me change my opinion.

For these reasons I think that, although ultimately laparotomy and drainage of a residual abscess almost invariably become necessary, it is unwise to submit all patients to immediate laparotomy as a matter of routine. No doubt there are many cases in which at the onset the violence of the toxæmia is such that early death occurs under any circumstances, whether laparotomy is performed or not. There are others in whom unnecessary and premature interference is able to turn the scale against recovery. I suggest that in most cases the better plan is to wait, to place the patient in a sitting posture, to apply ice to the abdomen, to give morphia, and to endeavour to combat toxæmia by saline infusion. The choice of the time for operation is a matter requiring the nicest judgment. In many cases at the end of the second week or in the third week the curve of the temperature chart will show a change, and the high continued pyrexia will be replaced by a remittent or intermittent fever. When this occurs a daily examination should be made for evidence of a subdiaphragmatic abscess. It may, per-

haps, be argued that to decide not only that peritonitis is present, but that the peritonitis is due to the pneumococcus, places too great a strain upon our powers of diagnosis, and that to attempt to do so will result from time to time in a disastrous refusal to operate in cases of septic peritonitis due to appendicitis or other causes. I believe, however, that a closer study of the symptoms of pneumococcal peritonitis and an appreciation of the part played by the accompanying pneumonic fever will enable us in a majority of cases to make a diagnosis with certainty. If it is recognised that the diagnosis is necessary for the benefit of the patient, I believe that it can be made or that we can train ourselves to make it.

The cases of peritonitis which recover are those which pass successfully through the pneumococcal septicæmia. After the termination of the acute septicæmia only a minority of cases die as a result of failure to secure drainage of the residual collection of pus.

Pyopericardium.—I have left myself but little time and space to deal with other suppurative conditions due to the pneumococcus. In pneumococcal pyopericardium I imagine that the same relation between the pneumonic fever and the residual collection of pus exists as we have seen in empyema and in peritonitis. If the pyopericardium is metapneumonic and drainage is established recovery will ensue. Pyopericardium is found frequently enough at the autopsy upon fatal cases of pneumonic fever. It is seldom that it forms a residual abscess after the termination of the fever. There have been a few successful cases of drainage of the pericardial sac within the last 20 years.

Suppurative Arthritis.—The lesion is probably here, as in osteomyelitis, on the diaphysial side of the epiphysial line. In infants, in whom alone pneumococcal arthritis is common, this line is intracapsular and the infection passes not to the medullary cavity or to beneath the periosteum, but to the joint. The arthritis may be purulent, seropurulent or serous. The prognosis, when the pneumonic fever has been survived, is here as elsewhere very good. Mr. Slesinger recently drained four or six joints in an infant which was under my care with excellent results.

Pneumococcal meningitis is nearly always fatal.

Notices.

Guy's Hospital Medical School.

FINAL F.R.C.S. COURSE.

A course of instruction for the May examination will begin on Thursday, March 1st, and will be conducted as follows:—

Mr. R. P. Rowlands and Mr. P. Turner—Special Clinical Demonstrations.

Mr. R. Davies-Colley.—Surgical Pathology.

Mr. W. H. Trethowan.—Orthopædic Surgery.

Mr. L. Bromley.—Operative Surgery.

Professor J. W. H. Eyre.—Immunity and Bacteriology.

Professor T. B. Johnston.—Surgical Anatomy.

Mr. W. H. Ogilvie.—Tutorial Classes and Demonstrations.

Clinical Lectures and Demonstrations on Special Subjects will be given by other members of the Staff.

Inclusive fee for the whole course, £21.

All wishing to join the course must lodge their applications on or before Saturday, February 24th, with the Dean, Guy's Hospital Medical School, S.E.1, from whom all details of the course may be obtained.

Dental Dinner.

The Annual Dinner of the Dental Society will be held at the Trocadero, on Saturday, March 10th.

Tickets are 12s. 6d. (exclusive of wines) and may be obtained from members of the Committee.

It is hoped that all new men will endeavour to attend this most important event in the Dental Calendar and that all old members will take advantage of this occasion to resume Hospital friendships with their qualified seniors now in practice.

Thirty Club Dinner.

The Second Annual Dinner of the Thirty Club will be held at Oddenino's Imperial Restaurant on Saturday, March 3rd, at 8 p.m. Members who intend to be present should communicate with the secretaries before February 24th.

J. J. CONYBEARE.

V. E. LLOYD.

Hon. Secretaries.

United Hospitals R.F.C.

CHALLENGE CUP—SEASON 1922-23.

The following Ties will be played at the Richmond Athletic Ground.

Round 1.—Tuesday, 6th February, Middlesex v. St. Thomas's.

Round 2.—Tuesday, 13th February, University College Hospital v. St. Mary's or St. George's. Thursday, 15th February, King's College Hospital v. St. Bartholomew's. Tuesday, 20th February, London v. Middlesex or St. Thomas's. Guy's (w.o.). Charing Cross (scratched).

Kick-off 2.40 p.m.

H. ROCKETT,
Secretary and Manager.

Rugby Football Club.

The Annual Dinner will be held at Oddenino's Imperial Restaurant, 60—62, Regent Street, on Tuesday, March 20th, 1923. Further details will be announced later.

Fencing.

Instruction in Foil, Sabre and Epee, by Captain Felix Gravé, will be resumed on Mondays, commencing February 5th, from 4 o'clock to 6 o'clock. A strong team in each weapon is required to meet the Honourable Artillery Company, Oxford University, and Harrow School, and any member of the Clubs' Union who has any skill is invited to practice. Beginners are also very welcome.

Blues.

Mr. Shepherd, of Oxford, the official outfitter to the Clubs' Union, attends on Thursdays at 4 p.m., Classroom II. Students requiring his services should notify the Secretary of the Blues Committee not later than the preceding Monday.

Guy's Hospital Lawn Tennis Club.

At the Annual General Meeting of the Hospital Lawn Tennis Club, held on November 23rd, 1922, the following were elected officers for the ensuing year:—

President.—Dr. Fawcett.

Vice-Presidents.—Mr. H. Chapple, Dr. H. W. Barber, Dr. Hunt and Mr. W. M. Mollison.

Captain.—E. E. Neser.

Hon. Sec.—H. Lewis-Philipps.

Committee.—Messrs. M. Jackson, R. R. Macintosh, L. Nurick, E. V. Potts, J. W. Schollum, P. Becker, N. L. Sharpley, W. G. Stanford.

Guy's Hospital.

In accordance with annual custom the House-Committee publishes for the information of the Medical, Surgical, and Nursing Staff the following Tables showing the total number of Patients sent during the past year to Convalescent Homes and Sanatoria.

Wards.	No. of Patients. 1921	1922
Astley Cooper	9	12
Cornelius	17	17
Lazarus	26	33
Job	30	34
Naaman	24	63
Luke	51	73
Patience and Samaritan	26	18
Evelyn	4	18
Charity	63	49
Dorcas	21	34
Lydia	48	41
Martha	35	35
Eye Wards	16	38
Addison	31	53
Mary	29	34
Stephen	37	40
Esther	20	38
Queen Victoria	17	3
Children's Ward	—	1
Out-Patient Department	*14	*11
	518	645

The subjoined list gives the distribution of the *Patients amongst the various Homes* :—

Ascot Priory (Women and Children)		53
Merchant Taylors' Home (Bognor) (Men)		48
Metropolitan Convalescent Institution:—		
Bexhill (Women)	38	
Bexhill (Little Common) (Men)	48	
Broadstairs (Children)	102	
Walton-on-Thames (Men & Women)	55	
		243
Parkwood, Swanley		159
Rustington Convalescent Home		48
Schiff Home of Recovery		82
		633

Sanatoria.

(Beds allocated free of charge to the Hospital by the King's Fund):—

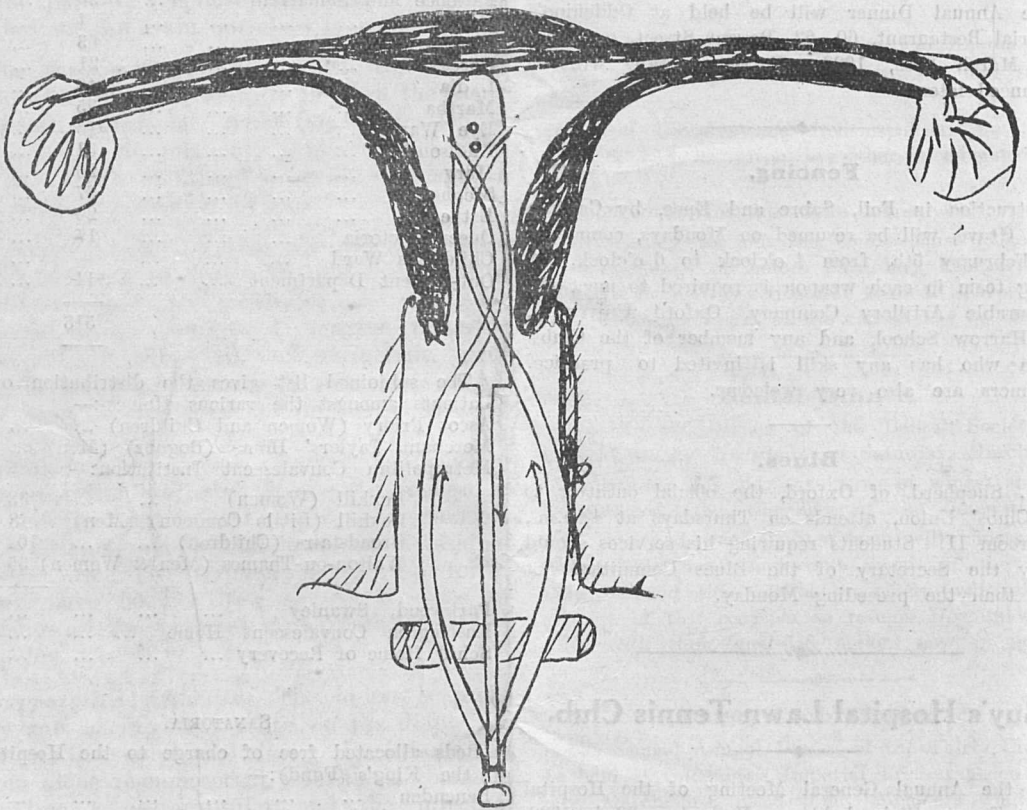
Benenden	3
Devon and Cornwall Sanatorium	7
Holt Sanatorium (Children)	1
Coldharbour House, Waddon	1
	645

*In addition to the above, sums amounting to £133 14s. have been contributed by the Samaritan Fund towards 82 cases sent away by the Invalid Children's Aid Association and the Charity Organisation Society for long periods of convalescence 82

727

Suggested Treatment for Early Chronic Salpingitis.

Some would treat acute salpingitis as acute appendicitis and make excision a working rule, but most prefer to tide over the acute phase in the hopes that the infection, which in 90 per cent. is said to be due to the gonococcus, will disperse and will not become chronic. Unfortunately salpingitis, like appendicitis, has a tendency to become chronic and late chronic salpingitis means a mass of adhesions in the pelvis—a very undesirable conclusion.



Graves thinks that the gonococcus gets into the tubes by traevrsing, but not infecting, the uterus, on the grounds that the gonococcus is so hard to find in the uterus in these cases. But Eden and Lockyear believe that the endometrial changes merit the supposition that there is an accompanying endometritis despite the scarcity of the gonococcus. Well, however that may be, it seems highly probable that the constant stream of gonococcal pus passed out of the tubes in salpingitis would infect the uterine mucosa, and if that is so no cure can be expected unless the tubes are drained. Hence it seems rational that in any case in which there is endometritis with suspected salpingitis, and certainly in any case of definite salpingitis, the tubes ought to be drained.

Now why should the abdomen be opened in order to drain the tubes when they are not so inaccessible from the vulva? For this purpose I have had a tubal catheter director made, by which a pair of ureteric catheters, strengthened internally by steel wire, can be passed into the Fallopian tubes via the uterus. (I am indebted to Messrs. Down Bros.) The cervix is dilated to ½ in. by Hegars. The instrument is then inserted and the uterus washed out with peroxide to carry away any cervical organisms introduced with the instrument and also to lessen the number of bacteria previously in the uterus.

The catheters are then passed up the affected tubes. A record syringe full of peroxide is attached to the end of each catheter in turn, and by means of alternate pumping and suction, accompanied by the movement of the catheter tip up and down the tube, there is no reason why each tube should not be washed out pretty effectively.

Marks on the catheters indicate the distance up the tubes it is safe to go since, of course, it is un-

desirable to carry gonococci up into the peritoneal cavity.

Only mild antiseptics could be used for fear of injury to the peritoneum should much get into the body cavity. Their value would be chiefly irrigatory. The instrument is then withdrawable leaving the catheters in the tubes and protruding at the vulva. Daily washouts could thus be effected and any drained fluid could be examined bacteriologically for vaccines or if tuberculous for other treatment.

Further, I should like to see the result of the injection into the tubes of the "Döderlein" bacillus —a normal inhabitant of the vaginal tract, which in virtue of the fact that it produces loctic acid, inhibits, if not prevents altogether, the growth of organisms in this part of the female anatomy. This organism ought to act as an efficient asymbiotic antiseptic, since it is adapted to the human organism far better than the gonococcus and can produce its antiseptic acid right in between the cells of the Fallopian mucous membranes to which it does no harm.

J. F. GOODENOUGH.

Guy's Hospital Chapel.

The following have kindly consented to preach in Chapel during Lent:—

Ash Wednesday, February 14.—The Right Rev. the Lord Bishop of Southwark.

Tuesday, February 20.—The Rev. E. H. Dunkley, B.A., Hospitaller of S. Bartholomew's.

Tuesday, February 27.—The Rev. W. A. Dunn, M.A., Vicar of the Church of the Holy Spirit, Clapham (Chaplain of Guy's Hospital, 1907—1911).

Tuesday, March 6.—The Rev. A. H. Browne, D.D., Vicar of S. Michael and all Angels, Paddington, and Chaplain to S. Mary's Hospital.

Thursday, March 8.—The Right Rev. the Lord Bishop of Kingston.

Tuesday, March 13.—The Rev. A. E. Popham, B.A., M.C., Vicar of S. Mary of Eton, Hackney Wick (Chaplain of Guy's Hospital, 1912—14).

Tuesday, March 20.—The Rev. W. C. E. Newbolt, M.A., Canon and Chancellor of S. Paul's Cathedral.

Monday, March 26.—The Rev. S. F. Hawkes, M.A., Vicar of S. John the Evangelist, East Dulwich.

Tuesday, March 27.—The Rev. A. W. Maplesden, M.A., LL.D., Canon and Chancellor of Southwark Cathedral.

Wednesday, March 28.—The Rev. R. P. Waugh, M.A., Vicar of S. Philip, Stepney, and Chaplain to the London Hospital.

(*All the above Services begin at* 8.10 *p.m.*)

Good Friday, March 30.—Three Hours' Service (12 noon to 3 p.m.). The Rev. R. C. V. Hodge, M.A., Vicar of S. Vedast, Foster Lane, E.C.

Reviews.

Remembering and Forgetting. By T. H. Pear, M.A., B.Sc. (Messrs. Methuen & Co., Ltd.) Price 7s. 6d. net.

The keen interest and pleasurable anticipation which are naturally engendered by a title such as this are fully justified by the admirable subject matter herein contained.

The older conceptions of the relations of the intensity and frequency of the stimulus, its associative connections and the interest which it calls forth, to the formation of a clear memory image are of course maintained; yet the trivial and apparently insignificant incidents which may be reinstated in consciousness by hypnosis recall the oft disputed statement that no precept is ever truly forgotten.

The author classifies forgotten experiences as (1) Embodied, (2) Exiled, (3) Superseded.

The first term embraces insignificent incidents with but a weak emotional concomitant, and also significant experiences which, owing to their complete congruity with the personality, also tend to sink into the limbo of forgetfulness.

The exiled experiences are those which are actively forgotten because their presence in consciousness is incompatible with mental calm. This, of course, is the type brought into prominence by Freud and which naturally holds the greatest interest for the medical reader.

The attitude of the mind towards the third class, is that of a man to the foolish vapourings of his youth—not actively hostile, yet completely uninterested.

The book presents a valuable addition to psychological literature and excels most modern works in its complete freedom from prejudice.

Hockey.

GUY'S v. R.E. CHATHAM.

Played on January 13th, at Elmers End. Neither side was at full strength for this match, Guy's being without Slater and Graham-Bonnalie. The Sappers

attacked first and scored within about ten minutes of the start. They continued to have the better of the game and pressed for most of the first half, though the Hospital forwards broke away on several occasions only to be well held by the Engineers backs. At half-time the R.E.'s led by 3 goals to nil.

In the second half the Hospital improved and had more of the game, but the forwards were weak in the circle and only one goal was obtained—J. W. Schollum netting from a mêlee in the goal-mouth. Before the end the Sappers scored a further goal through their inside left.

Final Score:—R.E. Chatham 4, Guy's 1.

Guy's Team.—D. E. Dunnill, C. G. Bowen, J. J. Coneybeare, A. C. Kempe, K. Hooper, D. W. Lloyd, W. S. Hunt, J. W. Schollum, L. T. Barford, A. Broido, L. E. Owen.

GUY'S v. R.N.C. GREENWICH.

Played on Wednesday, January 17th, at Greenwich. Lost (2—4).

Owing to last minute scratchings Guy's were considerably below strength again in this match, and considerable shuffling had to be made in the team.

Play was somewhat scrappy as the ground was very hard and accurate stickwork impossible. Guy's started strongly and after pressing for some time Hunt opened the scoring for the Hospital. The home side, however, soon drew level, and before half-time scored 3 goals.

On resuming, the home side again pressed, but Owen relieved on several occasions by good runs down the left wing, but he delayed his passes too long and no further score resulted for some time. At length, however, some good forward work resulted in Gathergood scoring an excellent goal. From now on the game was very even and both sides came near to scoring on several occasions. At last just before time Cook scored a further goal for his side.

Dunnill was very safe in goal throughout, and Bowen and Awdry at back tackled well but were inclined to clear too hard and wildly. Kingsbury played a good game at left half. The forwards did some good things individually, but the combination was poor. Owen played one of his best games on the left wing and though marked by the "Combined Services" right half, had by no means the worst of the argument.

Guy's Team.—D. E. Dunnill, C. G. Bowen, W. F. Awdry, A. C. Kempe, G. R. Ford, J. G. Kingsbury, Scholefield, W. S. Hunt (Capt.), G. W. Gathergood, A. Broido, L. E. Owen.

GUY'S v. REIGATE H.C.

Lost (4—5). Played, Saturday, January 27th, at Elmer's End. Guy's were practically at full strength for this match. Reigate pressed from the start and good work by their forwards resulting in their scoring after ten minutes play. On resuming Guy's attacked and after some open play Schollum went through and scored a goal from a very difficult angle. Reigate soon replied with another and before half-time netted a third time, and though the scorer appeared to be well offside the goal was allowed.

On resuming, Reigate went still further ahead their inside right scoring from a good pass from the left wing. Guy's now played up well and scored twice, through Schollum and Owen. Reigate increased their lead and before the end Barford scored a good goal from some improved forward work.

The Guy's team showed improved form in this match. Graham-Bonnalie was a tower of strength at left back. The halves worked hard, but Kempe, in the centre, was inclined to be slow. The forwards were good and bad in spasms. Hunt and Schollum on the right wing showed better understanding than they have done for some time, and the latter probably played his best game this season. Owen at centre played a hard game, and did quite well considering he was in an unaccustomed position.

Guy's Team.—D. E. Dunnill, C. G. Bowen, F. E. Graham-Bonnalie, D. W. Lloyd, A. C. Kempe, G. Gathergood, W. S. Hunt (Capt.), J. W. Schollum, L. E. Owen, Martin, L. J. Barford.

Publications Received.

The Isis, The New Cambridge, Medical Journal of South Africa, Burma Medical Times, Abstract of Bacteriology, The Sphinx (Liverpool), St. Mary's Hospital Gazette, Nursing Times, The Northerner (Armstrong College), Medical Review, Architectural Association Journal, Ivory Cross Journal, Journal of Clinical Research, Bedford College Union Magazine, London Hospital Gazette, Otago University Review (New Zealand), Hospital and Health Review, New York State Journal of Medicine, Archives of Medical Hydrology, Middlesex Hospital Journal, University of Durham College of Medicine Gazette.

Birth.

EVANS.—On January 21st, 1923, to Dr. and Mrs. Henry Evans, of Reedham, Norfolk, a daughter.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Alfred Henry Fison, D.Sc.

Unutterable gloom pervaded the Medical School and Hospital when it became known that Dr. Fison had died. As soon as possible after his accident, which occurred while he was attempting to fix a wireless aerial on the roof of the Medical School, he was conveyed to Astley Cooper Ward, and an operation was performed the same evening. The ceaseless efforts of all concerned proved, however, to be of no avail, and at noon on Sunday, February 4th, 1923, Dr. Fison passed away.

Photo by G. WALKE.

Many had come to look upon him as the "Grand Old Man" of the Hospital, and it is difficult to believe, even now, that his familiar form will no longer be seen at Guy's. His smiling nod to individual students as he walked through the Park, his patience in the Physics Laboratory, his clear, quiet tones, now intensely serious, now humorous, as he delivered one of his philosophical lectures in a theatre filled to overflowing by Staff and students—it is almost unbelievable that all these have gone.

Those who passed through his hands will realise what an irreparable loss has been occasioned by the untimely death of one who was held in the greatest affection and esteem by his colleagues and by all connected with the Hospital and School.

The funeral took place on Thursday, February 8th, the first part of the service being held in the Hospital Chapel at noon. The Medical School was closed, and the Chapel was filled to its utmost capacity, a large number of students remaining in the Colonnade throughout the service. After the singing of the hymn,

"Abide with me," the first part of the Burial Service was read by the Rev. A. G. Harris, Acting Chaplain, and Mrs. Albert Garcia sang Gounod's anthem, "O Divine Redeemer." The organ was played by Mr. W. H. Trethowan, Orthopædic Surgeon to the Hospital. A short address in appreciation of Dr. Fison's character and work was given by Canon Barnes, D.D., of Westminster Abbey, and through his kindness we are able to print the following summary of what he said—

"We are all distressed by the circumstances which bring us here to-day. To meet Dr. Fison was to be attracted at once by his kindliness, his sympathy, and his quiet humour. To his friends he was a most lovable personality; to his pupils he was a brilliant teacher who by his gifts won respect and inspired confidence. It is quite unnecessary for me here to speak of his exceptional success as a lecturer. With wide knowledge and commanding enthusiasm he had, for forty years, worked to spread an understanding of physics and cognate subjects. I remember that years ago I read his book entitled, "Recent Advances in Astronomy," and found in it that power of lurid exposition which for nearly two decades made him a most valued member of your Staff. He was, as we all know, a born teacher, eager for knowledge for himself, eager to impart it to others. Yet he would not have been so markedly successful had he not possessed an intuitive sympathy with his pupils. He was quick to seize new ideas, but equally quick to realise where minds less well-trained than his own would fail in perception. His powers were such that in research he would have done distinguished work; but he gave himself to the task for which he was supremely well qualified. As a result his death has been felt as a personal loss by all who remember with gratitude the value of his unstinted help. By his colleagues he was held in deserved esteem. Up and down the country there must be many thousands to whom, in Gilchrist Lectures and at other times, he opened the door to a new realm of thought.

He has been taken from us at an age—he was but 65—when it seemed as if years of good work still lay before him. We mourn the accident which cut short his life; and our sympathies go out especially to those to whom it has come as a sudden blow. Yet, we can thank God for the man and his work, his character and his example. We recommend his spirit to the loving mercy of the Father of all, and those of us who are Christians do so in the sure and certain hope of the resurrection to Eternal Life."

In addition to Mrs. Fison and other members of the family, the following were present: Lord Richard Cavendish, and Dr. Leaf, representing the Gilchrist Trustees, the Master of the Temple, representing the Local Examination and Lecturers' Syndicate of the University of Cambridge, Mr. F. G. Hallett, representing the Examining Board of the Royal Colleges of Physicians and Surgeons, Dr. William Wright, Dean of the London Hospital Medical College, the Dean of the Medical School, Guy's Hospital, the Rev. Ernest Raymond, representing the University Extension Committee, Hove, Sussex, Miss Tuke, Principal of Bedford College, Mr. F. Napier Sutton, F.I.C., Mr. G. Walter Knox, Dr. and Mrs. J. Porter Parkinson, Dr. Fawcett, Senior Physician to Guy's Hospital, the Matron, the Superintendent, and many other members of the Staff of the Hospital and Medical School.

After the service was over, the coffin, covered in wreaths, some from the students and from the Staff of the Medical School and Hospital, was conveyed to the Golders Green Crematorium.

At a General Court of the Hospital held on Monday last a vote of condolence was passed by the Governors to Mrs. Fison, and the members of her family, in her sad bereavement.

For those who never attended Dr. Fison's lectures on Philosophy, it would be difficult to believe how immensely popular they were with both students and Staff. It was often difficult to obtain a seat, even in the Physiological Theatre, on these occasions. Here, indeed was ample evidence of the great attraction his work held out to all who came in contact with it. We sincerely feel that in no better way, and certainly that he himself would have liked better, could the man and his work be commemorated than by the inauguration of a lecture, called by his name, to be delivered year by year by some prominent scientific philosopher.

"He toiled with us and helped us day by day,
Well loved by us; and in his special sphere
He laboured hard to make our road more clear;
And for our pleasure, in his kindly way,
He gave his time, revealing how a ray

Of light in myriad waves pulsating came,
And stars unseen in outer darkness flame.
Each in his time we passed beneath his sway,
Glad to pass on, yet left him with regret,
And saw by him a fine example set:
Honest in speech as thought, in him we lose
A man familiar and esteemed; we choose
Not to forget, 'though he has gone to test
That lost dimension that he dimly guessed."

"W."

We hope, in our next issue, to publish an appreciation of Dr. Fison and his work, together with a full-page plate.

Opening of the Bermondsey and Rotherhithe War Memorial Children's Ward by Her Highness Princess Victoria

WEDNESDAY, FEBRUARY 7TH, 1923.

The weather was so spiteful for this happy ceremony, that the day might have been a Friday. With no sun and frequent showers,

Photo by G. WALKRR.

the "Park" did not look as cheerful as it sounds, but that only served to accentuate the cheerful, cosy appearance of the ward itself. There a large number of residents from Bermondsey and Rotherhithe had assembled for the opening ceremony of their War Memorial, and along the walls in their small green cots were the "quietest, cleanest, happiest little children," as certified by the Daily Press on Thursday. (Oh! Haustus Chlor. Infantum, how much we owe you!)

At three o'clock Her Highness Princess Victoria was received at the Counting House by Viscount Goschen and proceeded to the Governor's Court Room, where the Chairman and members of the Committee of the Ber-

Photo by G. WALKER.

mondsey and Rotherhithe War Memorial were assembled. The Chairman presented a short address, dealing with the history and purposes of the Memorial, after which he asked the Treasurer and Governors of the Hospital to accept the Memorial Funds in trust for the perpetual endowment of the Children's Ward. Her Highness then proceeded to the Ward, accompanied by the Chairman of the War Memorial Committee and Viscount Goschen, followed by the Superintendent of the Hospital and the members of the War Memorial Com-

mittee and preceeded by Whitbread in full state, complete with wand of office. Here the Right Reverend the Bishop of Woolwich dedicated the ward, saying short prayers for the patients, the nurses, the doctors and the Hospital, and Her Highness then declared the Ward open as the Bermondsey and Rotherhithe War Memorial Ward.

The more formal proceedings over, the ward was open for inspection and—we cull the incident from a contemporary—"the Princess handed an orchid from her bouquet to a mite called 'Cecily,' who was eight and a half months old, but who looked two months old, so tiny was she. When the Princess passed on to the next cot Cecily cried for jealousy, and it was only when she was lifted into the arms of Sister Dixon that she ceased her baby sobs."

Princess Victoria also visited Stephen and Astley-Cooper Wards, showing the greatest interest in the patients, about whom she asked the Sisters many questions.

A very happy little ceremony in memory of the greatest of all self-sacrifices, was concluded with tea in the Governors' Dining Room.

Reconstruction in Russia.

Probably no one in England to-day seriously doubts that the future of Russia concerns the rest of Europe in no small degree. Leaving aside the humanitarian point of view for a moment, and speaking of things practical, we shall suffer severe losses commercially if Russia remains in her present deplorable state, and, since she cannot be isolated, if disease dominate such a vast area, it will not be long before we are all involved in a fight against typhus and cholera, to mention only two of the enemies.

In spite of the terrible conditions existing up to the present there are hopeful signs—signs that, thanks to the self-sacrifice and nobility of her few educated people, Russia will live to reconstruct social order out of chaos. For this work she must have trained leaders, and those trained leaders must at least be able to keep body and soul together if they are to devote themselves to the care and education of that enormous family of poor illiterate children which the country resembles to-day.

Everything is lacking—food, clothing, firing—the essentials of life. For study everything is lacking too; there are few books, no modern apparatus, and certainly not enough pens, ink and paper for these anxious students to take notes of their lectures. Everything saleable has already gone to satisfy material needs, so one may see distinguished men of science literally in rags and barefoot—and that in the Russian winter!

A professor's pay amounts to about 46,000,000 roubles per month, this sum having the buying power of 50s. of our money. Half of it goes for bread alone if he happens to be a family man. The Universities only open at 5 o'clock in the evening, so that all may earn a living before study can be thought of, but, because of the long hours devoted to practical work, the medicals have the least opportunity of all students for wage-earning labour.

Sometimes these people have existed on roots and on the bark of trees for weeks together rather than give up their work. Towards each other they show the most marvellous generosity and self-sacrifice; doctors, themselves half dead from undernourishment and fatigue, are going about caring for the sick and the dying. In the terrible epidemics it is the students who have voluntarily banded themselves together to fight the foe, their only hope of remuneration being an insufficient meal now and again. Needless to say many have laid down their lives and yet there are always others who come forward to take their places.

Great results are, however, achieved. A photograph sent with a recent report shows how Dr. Fabrikant, one of the most renowned surgeons in the country, has performed 270 major operations on a table such as most of us put in our sculleries. An operation successfully performed on the wife of one of the Government officials brought him the chance of a handsome fee, but he refused this, preferring to have the money devoted to the equipment of a new student home that more young people might be trained to carry on his work.

The Russian degrees are worth now about 70 per cent. of their pre-war standard, but even this proportion of sound work will be impossible unless some outside help is forthcoming.

It is not generally known that through the Universities' Committee of The Imperial War

Relief a helping hand is being held out by the British Universities and those of 41 other countries, to sister Universities in Central Europe. Obviously the best help that can be given is that which enables them to train themselves and to build up their institutions according to their special needs.

So far £66,000 has been collected in England since 1920, and £10,000 has been sent to Russia through Mr. Harold Gibson and his helpers of the European Student Relief, working in close co-operation with Dr. Nansen's mission.

The Russian Government has guaranteed the safe arrival of everything sent out, and the losses up to date are estimated at one-half of 1 per cent. of stores dispatched. Goods are weighed on entering the country and again on reaching their destination; any shortage is made good by the Government at the estimate of the European Student Relief representative, without further investigation.

This year the Medical Schools of London have not yet been approached, owing to the pressure of the Combined Hospitals Appeal. Now it is proposed to make a specific appeal on behalf of Kazan University and it is hoped that our Medical Schools will interest themselves particularly in the Medical Faculty. Already the Royal Chemical Society has guaranteed to make itself responsible for the teaching Staff of the Chemical Faculty.

According to Mr. Gibson's latest report there are 1,628 medical students at Kazan. At a cost of £3 per head these men and women could be given a good meal once a day for the coming academic year. The meal would consist of—

One dish of meat and rice *or* a plate of soup and meal pudding.

A cup of tea with sugar, but without milk, *or* a cup of cocoa with milk and sugar.

A hunk of bread.

Thus, £4,884 is needed for students alone without including the 533 members of the teaching staff.

Gifts in kind. There is urgent need of—

Food stuffs, such as milk, flour, cocoa, tea, rice, sugar, etc.

Clothing.—Good woollens, such as suits, dresses, and underclothes, either new or partially worn, also boots and shoes for men and women.

Books and Journals, especially those published since 1915. These may be in almost any language, as the Russians are good linguists.

Hospital Stores, especially drugs, linen, and disinfectants.

Surgical Instruments.

It is unnecessary to lay further emphasis upon the deplorable conditions now existing amongst our fellow students and doctors, and we trust that this appeal will not be made in vain. All contributions, however small, whether in money or kind, will be gratefully received by the Editor of the GAZETTE, who has undertaken to forward them to the proper authorities.

The University Union Society.

There is a story told of a distinguished American gentleman, who set out one day, during the War, to try and find the University of London. It was his desire to be brought into personal contact with the students, in order that—American like—he might be able to estimate the effect of the War upon this particular class of the community. Informed that he would find the University at South Kensington, he spent a weary morning there inspecting the statue of Queen Victoria, the Senate Room, and the Library, and concluded that all the students must be at the front. Subsequently, however, it was born in upon this investigator that there existed some thirty-six Hospitals and Colleges in different quarters of the Metropolis, and, having made a tour of these, he summed up his conclusions as follows: "Well, you have got the disjecta membra of a giant; the biggest thing in the way of Universities in the world, if you only go the right way to work."

One ventures to think that the average Londoner would hardly have been in a position to correct the first impressions of our American friend, or to have conducted his tour of the University. It is only recently, owing to the fact that there has been some controversial discussion in the Press about the site for the proposed central building of this nebulous organisation, that the London public have realised that it boasts of a University at all.

It may justly be claimed that it was the students who first realised the enormous disadvantages caused by this lack of co-ordination and University consciousness in the life of the Undergraduate, and consequently, in the general standing of the Graduate. The problem was several times discussed at informal gatherings of the Presidents of the various Colleges, and the conclusion was reached that if anything was to be made of the University life, as such, the movement must come from the students themselves. The outcome of these discussions was the foundation of what is now "The University of London Union Society."

During this period of its history the Union had the privilege of hearing at its debates and meetings (held at that time at the Essex Hall), Lord Robert Cecil, The Right Hon. J H. Whitley, M.P., and the Editor of *Punch*. Before the second year of its existence, it had been granted official recognition by the Senate.

In the summer of 1922, owing to the generosity of the Senate and of others, the Union was able to acquire a Y.M.C.A. building in Malet Street, Bloomsbury, and to furnish a Debating Hall, Lounge, and Committee Room. This building has the advantage of being situ-

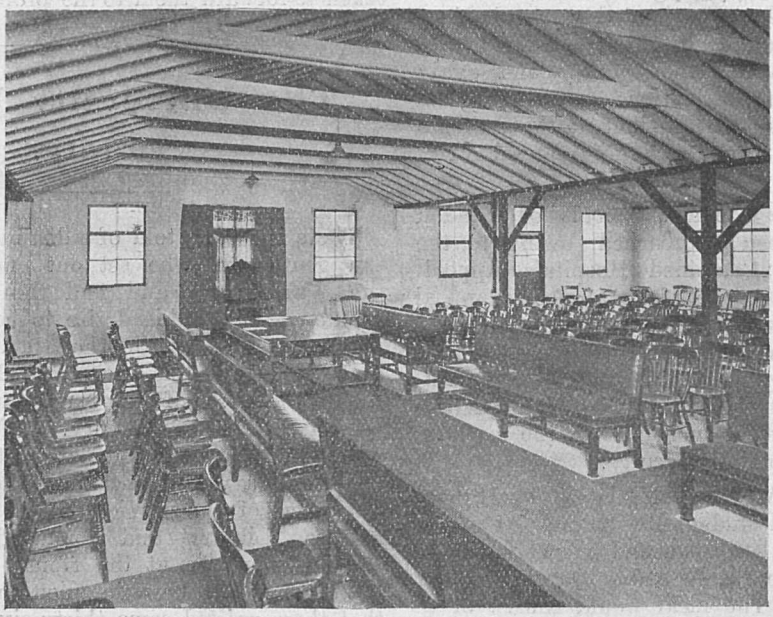

Photo by courtesy of the "VINCULA."

THE DEBATING HALL AT THE UNION.

When the history of this society comes to be written, not least among those honoured as builders of the Union will be the thousand or so "original members," who, with little prospect of any immediate returns for their money, were willing to put down a guinea for this scheme, so great was their faith in its potentialities. Owing to this vigorous support, the Union was, before long, able to set up an office in Gower Street, and the machinery which was to co-ordinate the students of this so-called "Disjecta Membra" gradually came into being.

ated on the site chosen by the University for its Central Buildings. It was opened by Lord Haldane in November last, and has since then been open every day for the use of members.

It is since the acquisition of these premises that the Union may really be said to have begun to achieve, in however humble a degree, the purpose for which it set out. Here there is a central meeting ground, common to all students of all Hospitals and Colleges who care to become members. Debates are held every fortnight, and during this session visits have

been paid to the Union by Viscount Ullswater, late Speaker in the House of Commons, Lady Rhondda, and members of the Oxford and Cambridge Unions. Last week a lantern lecture on the Everest Expedition was given by Dr. Longstaff, a member of last year's expedition, and on February 20th a Mock Trial will be held. Teas, at very moderate charges, are privided in the Lounge, and facilities are also present for bridge, table tennis, etc. Last, but not least, a fortnightly publication, the "Vincula," the first paper of its kind ever to have been attempted, is now produced by the Union. Through its columns members of Colleges, who previously never had an opportunity of hearing news of the rest of the University, may read the results of matches, rags, and many other items of interest.

Reference has already been made to the courage of original members. Such an effect of imagination and idealism is not needed by the potential new member of to-day. The Union has been created. But much remains to be done before it will be worthy of this great University and of London, and so it is with hope that the Union looks to new members for help in the realisation of its aims.

The two photographs, published with this article, show, to some extent, what has already been done and also the immense possibilities which rest in the hands of the students. It is well worth the while of everyone to pay a visit to the Union or to find out further particulars from Mr. T. G. Scott, or from the Secretary, The University Union, Malet Street, W.C. 1. Entry forms may also be obtained from the Wills Librarian.

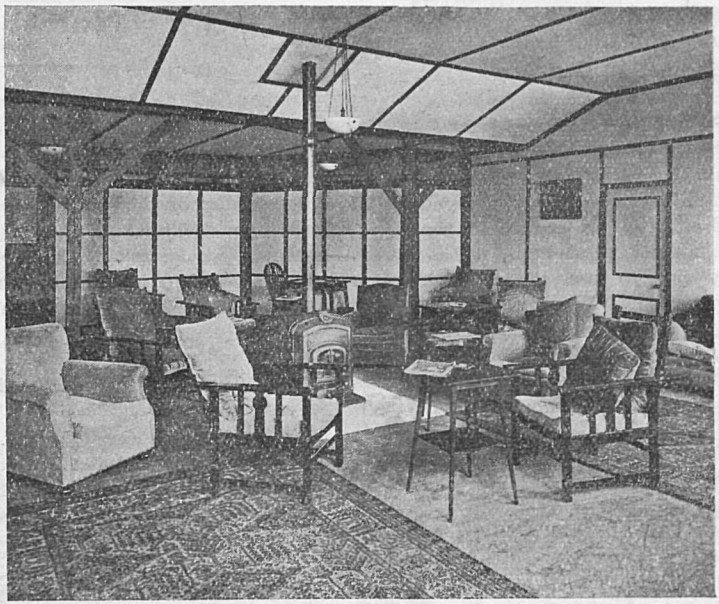

Photo by courtesy of the "Vincula."

ONE OF THE LOUNGES.

Papers by Guy's Men.

W. Kelsey Fry, M.C., M.R.C.S., L.R.C.P., L.D.S. The Retention of Complete Dentures.—*Brit. Dent. Journ.*, xliv., 1923, p. 97.

R. O. Moon, M.D., F.R.C.P. The FitzPatrick Lectures on the Post Hippocratic Schools of Medicine.—*Brit. Med. Journ.*, 1922, i., p. 187.

H. W. Barber, M.B. Case of Darier's Disease.—Proc. Roy. Soc. Med., xvi., 1923, Sec. of Dermatology, p. 51.

C. P. Symonds, M.B., B.Ch. Case of Myasthenia Gravis in which Throat Symptoms were an early sign.—*Ibid.*, Sec. of Laryngology, p. 17.

W. M. Mollison, M.Ch. Case of Multiple Foci of Growth in the Palate and Tonsil.—*Ibid.*, p. 19.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—You published in the last edition a letter I wrote you, and you put at the bottom of my signature that I was a Captain R.A.M.C (retired). That is not so. I am a Captain of the R.A.M.C. on the Reserve of Officers.—Yours truly,

R. E. G. PHILLIPS.

Oakfield,
Montgomery.
February 6th, 1923.

The Beggars' Dances.

DEAR SIR,—May I crave the courtesy of your columns to say that as the retiring management of the Beggars' Dances have not considered themselves an official body in the Hospital itself, it has always been their policy not to use the GAZETTE as a medium for advertisement. Therefore, on their behalf, I beg to say that they do not associate themselves in any way with the letter published in your last issue, which is not strictly accurate in all its details.—I am, Sir, yours sincerely,

C. H. EDNEY.
(Late Gen. Org. Sec.)

Medical School,
Guy's Hospital,
London Bridge, S.E.1.
February 6th, 1923.

The Residents' Theatricals.

DEAR SIR,—Will you please allow me space in your columns to offer the thanks of all the Residents to the numerous friends who helped them to make a success of the Theatricals last week.

Firstly we must thank Mr. O'Meara, whose indefatigable energy got the play going in time, and kept it going through the three nights; next, Mr. Bonar, who, although insulted in the play, returned good for evil by attending each night and playing the accompaniments to the songs.

We are also very much indebted to the two members of the Cosmopolitan Five, Messrs. Beccle and Richardson, who came and played during the intervals, courageously taking on their shoulders, and successfully carrying out, the duties of a whole orchestra.

The help of all these gentlemen and of those who volunteered to act as stewards and as scene-shifters made the task of the Residents a very easy one. We cannot thank them enough.

Lastly we would thank all those of your readers who came to the Theatricals, and especially those of them that laughed, for the splendid encouragement that they gave us.—Yours sincerely,

A. T. ROGERS.

Guy's Hospital,
London, S.E.1.
February 14th, 1923.

Notices.

Dental Dinner.

Will all students who wish to attend this function on March 10th, at the Trocadero, please acquaint any member of the Committee as soon as possible in order to facilitate the arrangement of seats and estimate for catering. Tickets 12s. 6d. each (exclusive of wine) are now becoming limited, but may still be obtained from any member of the Committee.

Dental Society.

A paper will be read by Mr. Bayliss at the meeting fixed for Thursday, February 22nd, on "The avoidance of pain in Dental Surgery." All dental students are invited. Tea will be provided as usual.

Directory of Guy's Men.

We regret the omission of the following corrections and additions in the lately published *Directory*:—

T. B. Layton, D.S.O., M.B., B.S., 10, Welbeck St., W.1. ('Phone: Mayfair 3913.)

Frank Cook, M.B., B.S., F.R.C.S., 14, St. Thomas' St., S.E.1. ('Phone: Hop 5318.)

Rolf Creasy, Sen., M.R.C.S., L.R.C.P., (Temp Add.) 36, Weymouth St., W.1. ('Phone: Paddington 904.)

Publications Received.

The Isis, St. Bartholomew's Hospital Journal, Journal, Queen's Medical Magazine (Birmingham), Dental Record, The Prescriber, Nursing Times, New Zealand Medical Journal, The Old Cambridge, The New Cambridge, The Nonsuch (Bristol), University College Hospital Magazine, The Serpent (Manchester), Manchester University Medical School Gazette, The Medical Review, Abstracts of Bacteriology, British Medical Journal.

Dental Impressions.

A Paper delivered before the Dental Society by Mr. T. S. WARNER.

Mr. President and Gentlemen,

During recent years, vast progress has been made upon the subject of making dentures, and this has been necessarily preceded by more highly perfected methods of impression taking, since the failure or the success of a denture depends primarily upon a suitable impression of the mouth for which the plate is to be constructed. I may therefore be excused for bringing this very important subject of impression-taking before you this evening.

It is convenient to deal first with the materials which are employed for actually taking the impression, for, as a general rule, each impression compound is capable of being used for some particular purpose. Such materials may be divided into two distinct classes—one in which the substance is mixed with water and introduced in a fluid state into the mouth and allowed to set owing to a chemical change which has taken place, and the other in which compounds are subjected to some form of heat in order to soften them, but return to their original state due to the purely physical change of cooling.

Of the various forms of impression materials, plaster of Paris belongs to the first class, and such substances as composition, gutta percha, and wax to the second class. The first, when in a fluid state, gives the most accurate reproduction of the surface of the teeth and gums, is the least liable to cause any distortion of the marginal soft tissues, and is also not liable to distortion on removal from the mouth. It frequently breaks, but the pieces are usually of sufficient size to allow of their being accurately rejoined. Ordinary composition consists mainly of resinous substances together with stearin. It softens at a higher temperature than that of the mouth, possesses plasticity and usually gives a good sharp impression. Impression compound has the great disadvantage of showing a marked contraction on cooling. It requires a considerable force to drive the compound into contact with the tissues, and is capable of exercising considerable pressure when partially confined in an accurately fitting tray. The pressure is found to be greater on the centre of the palate than on the alveolar ridges, causing the familiar "rock" in the finished denture. Moreover, composition is very readily distorted at the edges, giving rise to an undesirable air-space. Gutta percha is commended by some as being highly suitable for certain types of impressions. When heated to a temperature of about 65° C. the material becomes plastic, and will take a very fine impression when pressed into contact, and, when allowed to cool, will harden with little shrinkage. It has a much lower specific heat than composition has, and therefore, although used at a considerably higher temperature, is less liable to burn the patient than composition used under similar conditions. A gutta percha impression imparts a smooth and silky surface to the plaster casts derived from it.

This brings us to the actual uses of the various forms of impression material. Although a partial impression is of just as much importance as a full impression, it rarely receives the same amount of patience and care, merely because a partial denture, although constructed upon a faulty impression, may be made usable by the patient by the addition of bands or else by clamping it between standing teeth.

Let us suppose that the impression of an upper jaw, with most of the teeth standing and showing marked undercuts, is required. The teeth, if not in a perfectly clean state, are scaled and polished in order to facilitate the easy removal of the impression. A stock box tray is tried in the mouth, and, if not perfectly suitable in shape, is bent until it meets the requirements of the case in hand. If the vault of the mouth is found to be excessively high, the tray may be conveniently built up to the corresponding condition with pink wax. Careful note is then made of the positions of the standing teeth, since the latter invariably determine the direction of the removal of the impression. A mix of impression plaster is then made, a solution of carmine in ammonia added to act as a colouring agent, and a few drops of a 7 per cent. solution of potassium sulphate to act as the accelerator. The amount of accelerator added depends upon the likes and desires of the operator and upon the brand of plaster. A dab of soft plaster is placed in the vault of the mouth in order to prevent the entrapping of air bubbles by the impression, and the tray is filled with plaster. The latter is quickly inserted in the mouth and adjusted in position by a firm "wiggly" motion and held in place. After a time, depending upon the thickness of the mix of plaster, the temperature, and the amount of accelerator added, the impression becomes perfectly hard. The excess of plaster in the bowl is tested, and when it is found to give a good, clean fracture, the tray alone is removed by a firm depression of the handle. This leaves the impression intact in the mouth. A pair of metal shears is then used to make a gash along the outside of the impression form wherever a fracture of the plaster is desired. The positions of such grooves are determined, of course, by the positions of the standing teeth. The lip and cheeks of the patient are then raised, and the peripheral surface of the plaster on the buccal side of the alveolar ridge is depressed with firm pressure. This causes the plaster to fracture along the occlusal surfaces of the teeth and also along the grooves made by the metal shears. When all the plaster on the buccal

side of the teeth has been removed, the impression of the palate itself may generally be removed without suffering further fracture. In this manner, the fracture of an impression, which can usually be removed in three or four large pieces, is maintained under the complete control of the operator. The mouth is then carefully examined with a mouth mirror for any small fragments of plaster which have been retained by the undercuts of the standing teeth, and are removed by means of a pair of forceps. They are then placed in their correct positions in relation to the larger fragments. The plaster is then allowed to become thoroughly hardened, and the pieces are replaced in their positions in the metal tray. They are subsequently fixed in these positions by means of wax preparatory to casting the impression. Should any excessive difficulty be experienced in the re-adjustments of the fragments, they should be soaked in warm water, when they can easily be made to assume their appropriate positions. It should be obvious that, if a tightly-fitting tray is used in place of the suggested standard box tray, only a thin film of plaster separates the surface of the tray from the palate and the teeth. Upon removal of the impression from the mouth, the plaster breaks into a number of inconveniently small fragments, which are quite incapable of being accurately reassembled. The plaster fractures owing to the existing undercuts of the mouth, and they are therefore accurately reproduced when the impression is pieced together again.

Gutta percha also is a satisfactory material to use in such a case. A preliminary composition impression is first taken, from which a special metal tray is constructed, two layers of wax intervening between the cast and the special tray. The palatal surface of the tray is thoroughly roughened, and a large hole made in the centre in order to relieve the excess of pressure on the palate due to the material. The material is immersed in very hot water, and kneaded so as to become uniformly soft throughout the whole of its mass. The tray is dry-heated, and the gutta percha pressed firmly home into it. The surface of the material is smeared with vaseline and quickly placed in the mouth and pushed with firm pressure into its correct position. The lingual surface of the tray is sprayed with cold water, which is removed from the mouth by means of a saliva ejector, until the impression material has become quite cold again. The impression is removed, by depressing the handle of the tray, and cast as soon as possible. Gutta percha is a poor conductor of heat and is consequently difficult to cool and will warp if unequally compressed. This is obviated by the use of a thin, uniform layer of material which can be secured only by means of a special metal tray made with two layers of wax intervening between the rough cast and the constructed tray. The material will reproduce undercuts accurately, and is found to be an excellent impression material when used under suitable conditions.

Although gutta percha and plaster are the two most suitable materials for taking partial impressions, composition is now used in large quantities for that purpose. The method of procedure is identical with that described for gutta percha, but it is unnecessary to heat the material to such a high temperature as that required by the former. In order to soften composition, it is often found convenient to suspend the material in a rubber dam surrounded by hot water, thus preventing the composition from adhering to the bottom of the bowl in which it is heated, which it invariably does if allowed to come into direct contact with the surface of the bowl. The great disadvantage of all forms of composition is that it is quite incapable of giving an accurate reproduction of an undercut. Even when apparently hard it will drag in order to free itself from any undercut in the mouth, and the latter is therefore not reproduced in the finished cast.

Since the retention should depend mainly upon fitting the plate into convenient undercuts to act as a hold, it is obvious that all undercuts should be faithfully reproduced by the impression material. Composition is not capable of doing this, and should therefore not be employed to obtain the final impression, preference being given to either plaster or gutta percha. On the other hand, some workers assert that a drag in the impression is desirable, since, if the undercuts are reproduced accurately, the finished denture will not assume its correct position around the fitting surfaces of the teeth, and will subsequently have to be "eased" by the amount the composition would have "dragged." This appears a poor excuse for the use of composition, for it is infinitely preferable to make a correctly fitting plate with subsequent "easing" to one capable of easily slipping in and out of position. Moreover, vulcanite has a definite spring, which makes the denture capable of accurately fitting moderately undercut surfaces. Another method suggested is useful when several scattered teeth are to be replaced in the upper jaw, and the gum is of unequal hardness, and particularly when the gum around and external to the natural teeth is soft. An impression is first to be taken of the area to be covered by the base plate, and secondly of the first tray in position and also the natural teeth, with an ordinary stock tray. A metal base plate is made to the cast of the rough impression so as to project between the existing teeth. The palatal surface is thoroughly roughened so as to hold the plaster in position, and the lingual surface is polished. An impression is taken with the base plate, and the surplus plaster between the teeth removed. A stock tray is then filled with plaster and an impression of the whole is taken. The stock tray and its impression are removed, followed by the base and impression. The latter is then replaced in its correct position in the stock tray preparatory to casting.

Of much importance is the impression of an edentulous mouth, since the retention of an upper or of a lower denture depends very considerably upon the degree of perfection of the impression from which the denture is constructed. First of all, let us consider the essentials of a good impression. What we aim at securing is an impression of the mouth when in the most suitable state for the support and the retention of a denture. Soft tissue is the factor which creates the variableness in impressions. Rarely is an impression perfect for its intended use unless the soft tissues are, to a greater or lesser extent, displaced, whereas hard tissue must always be acurately reproduced. The impression should be such that the denture will press evenly on all parts of a hard and healthy gum. It should fit closely over as large an area as possible, since the adhesion of the finished plate is proportional to the area covered, especially over surfaces perpendicular to the occlusal surfaces of the teeth. All air must necessarily be excluded from the area covered by the plate. In all cases, sufficient room must be left for the muscles to have free play. There are no satisfactory tests of the retention which will be afforded by an impression—the best we can do is to test the bite blocks. Not until the denture is completed is the efficiency of the impression put to test.

First, we may consider the methods of obtaining our "most effective shape." Let it now be stated that for an edentulous case, a special tray, whether of metal or of some form of composition, is absolutely necessary. If a metal tray is used, it is first inserted in the mouth in order to ascertain if any alterations are necessary. If the flanges are found to impinge on the muscles or on soft tissue, the tray is made quite free. This is also carried out with the frenum of the lip. Should the tray require reinforcement around the periphery, pink wax is added so as to build the tray up to the correct size. The palatal border of the tray is slightly warmed in a flame, and a roll of soft wax fixed on the maxillary surface, allowing the extremities to extend around the tuberosities. The tray is then pressed vertically upwards in the mouth, and any excess of wax is cut away after the removal of the tray. It should be clearly understood that this addition of wax is in no way a part of the impression—it is essentially a part of the tray. It has a treble function. First, it compresses the soft tissue at the posterior surface of the hard palate. Second, it prevents the plaster from extending too far backwards, and third, it prevents the contraction of the palatal muscles drawing down the palatal portion of the impression. Such a process is known as "post-damming," and upon this the success or the failure of the denture depends. A hole is made in the centre of the tray in order to prevent excess pressure of the impression material in the centre of the palate. A mix of plaster is then made as already described, and eau de Cologne may be added so as to make the material more agreeable to the patient. The tray is filled, and dabs of plaster are placed against the tuberosities and in the centre of the palate where air may be entrapped. The tray is then inserted as rapidly as possible, the mouth being half open so that the muscles are not drawn tightly across the tuberosities to prevent the tray passing up.

The tissues of the palate are then more nearly in their natural position, and the muscles are relaxed. There is a large difference between the shapes of the tissues over the back part of the palate when the mouth is opened compared with when it is closed. The cheeks are then pulled outwards and downwards so as to impress the muscles on the soft plaster. The same is done with the lip so as to set the frenum on the plaster. Some workers prefer to allow the patient to carry out this muscle trimming by suitable movements of the lip and cheeks. The actions of whistling and of smiling, or the pronunciation of such words as "wow" and "heel" are suggested to record the impressions of the muscles when assuming their various positions. It is preferable, however, for the operator to pull on the cheeks and lip in order to ensure the thoroughness of the operation. What we aim at securing is the fullest depth of flange permissible by correct impression technique. The plaster is allowed to set, and when it breaks with a clean fracture, the handle of the tray is held and the lip and cheeks raised so as to allow the ingress of air. The handle is then depressed, and the impression yields to this pressure. It is removed, and the mouth examined for pieces of plaster which have become detached owing to undercuts. These are affixed in their correct positions. If an impression is allowed to remain in the mouth for too long a period, the setting plaster absorbs the film of saliva covering the mucous membrane causing a powerful vacuum to be formed. If the impression is wrenched away from the mouth, it is possible that the epithelium of the palate may be torn away, and to obviate this the vacuum is destroyed by raising the cheeks and spraying a film of water between the plaster and the gum. The impression may then be removed without mishatp.

The method of proceedure for a lower edentulous impression is similar to that for an upper. The tray must be sufficiently cut away to prevent distortion of any of the muscles, although some workers are bold enough to state that they use the marginal muscles as part of the foundation of the finished denture. The tray is filled with soft plaster and adjusted in position with a "wiggly" motion.

As each side of the tray comes into position, the finger is employed to distend the cheek outwards so as to prevent the entrapping of soft tissue of the mouth beneath the buccal flange of the tray. The patient is instructed to project the tongue forwards so as to impress the frenum on the impression and in order to allow the soft plaster to sink as far as possible on the lingual side of the ridge. When the plaster has set, the tray is removed as with an upper impression.

Composition is also used extensively for securing full impressions, since it is easily manipulated. To diminish warpage, an even thickness of compound is necessary, therefore a special tray is essential. The compound is made quite soft, a thin layer is placed in the tray, smeared with vaseline so as to prevent its sticking to the tissues, and finally passed over a smokeless flame in order to secure a smooth even surface. The tray is inserted in the mouth and pressed into contact, a hole in the centre of the tray allowing the escape of excess composition. Muscle-trimming is carried out as with a plaster impression, and when the composition is hard, the impression is removed in the same manner as for a plaster impression.

In edentulous cases, some impression workers advocate a process known as "conforming," i.e., a slight pressure horizontally around the buccal and labial margins. This may be carried out with plaster, but much more easily with composition impressions. While the impression material is still in a plastic state, and firm pressure is being maintained to keep the tray in position, the cheeks and lips are pressed firmly against the soft material. By this means the tissues of the buccal walls are compressed. A more satisfactory method of obtaining the same effect seems to be the scraping of the cast on the buccal surfaces of the ridges, since by this means the process is kept under control. In any case, "conforming" appears to be a very pernicious practice. Undoubtedly it affords a temporary hold to the finished denture, but the tissues ulcerate and yield to the continual pressure exerted upon them by the denture, so that the fallacy soon becomes evident. Some regard "post-damming" as equally undesirable, but a denture which fits well along the posterior surface is preferable to one which does not fit so tightly and which exerts a tickling effect. "Conforming" is merely a temporary artifice to aid the retention of a denture, whereas "post-damming" brings about permanent and highly desirable effects. Surely, therefore, the latter is justified.

Some workers now proceed to test the perfection of their impressions. There is no practical test for the perfection of a plaster impression, for, should it be replaced in the mouth, strong adhesion may be induced by its capacity to absorb the moisture upon the mucous membrane. This will take place equally well with a poorly adapted impression. Moreover, an impression which drops freely when replaced in the mouth may be the means of constructing a perfectly satisfactory denture. A plaster impression is very liable to be damaged by replacement in the mouth once it has been removed, and therefore such a practice is highly undesirable. A composition impression, although not visibly damaged, will warp to a considerable extent with frequent visits to the mouth. The hard tissues of the mouth situated about the median line are outlined with an indelible pencil so that, when the impression is replaced, the pencil line is reproduced on it. The impression is then relieved by scraping within the area outlined. It will eliminate rocking on hard central areas, and is capable of imparting peripheral bearing to the denture. In all cases, relief of hard, bony ridges must be secured by suitably scraping the impression.

During recent years the closed-mouth impression technique has been introduced. It is claimed that, by this method, results have been achieved which are unobtainable by ordinary impression methods. A rough composition impression of the maxilla is taken, and a fairly accurate impression of the lower jaw. A special base plate tray, without a handle, is made from the model of the upper jaw, taking care that there is no impingement upon the muscles. A layer of composition of uniform thickness is conformed to the palatal surface of this base plate so as to ensure uniform pressure on all the tissues when the impression is being taken. On the lingual surface of the tray a bite rim of composition is affixed. The composition on the palatal surface is then softened in a blowpipe flame, immersed quickly in hot water, and the upper impression taken, "steady, firm," pressure being used. When perfectly cold, the impression is removed. Any deficiencies in the impression are noted, and, after the impression has been replaced in the mouth, these are made up by means of a tracing stick. The impression should then show suction, the latter being a criterion of the perfection of the impression. Muscle trimming is achieved by warming the periphery of the impression and instructing the patient to make appropriate cheek movements. The palate is relieved for hard areas as already described. The bite having been taken, an upper denture is constructed upon the accurate second impression, and a lower on the fairly accurate first impression. The upper should show perfect adhesion, which is lacking in the lower. The latter is then lined with a wafer of composition and warmed. It is inserted in the mouth with the upper denture and the two articulated. When the patient bites, the composition re-

produces the lower jaw and muscles in position when under normal biting pressure. When the composition is cold, the lower denture is removed and relined. It is then supposed to have perfect suction.

The impression method above described has many pitfalls which do not accompany ordinary methods. The heating of composition for the upper impression by means of a blowpipe flame is of doubtful expediency, since uneven heating is bound to cause a warp. Again, when the patient provides the driving force, the risks of uneven pressure are very great. One of the greatest advocates of this method is bound to admit that he cannot obtain satisfactory results with the lower jaw. Probably this is due to the fact that the "conforming" which keeps his upper denture temporarily in place is also carried out with the lower impression. But a vertical section of the lower jaw shows it to be roughly triangular in shape, so that even though the lower impression is conformed, it will not prevent the denture from tending to be raised towards the top of the ridge. It may here be stated that muscle free dentures made by the ordinary impression method are equally as satisfactory as those made when the closed-mouth impression technique is employed. In many cases they are far more satisfactory. Those who use this method are no further advanced than those who carefully carve their bite blocks, since the effect of the latter is always put to test with the mouth closed.

We may, for edentulous upper cases, quote the following as a good standard method, the procedure for the lower having been previously described. A rough composition impression is taken of the upper jaw by means of an ordinary standard tray. The first requirement for the working impression is an easily adaptable tray. A sheet of S.S.W. tray compound is warmed until plastic, and is conformed to the surface of the upper jaw. The periphery is trimmed until it approximately meets the requirements of any special tray, i.e., it should be sufficiently deep around the edges without impinging upon the muscles. A small hole is then made in the centre of the tray, and the latter is then inserted in the mouth. The periphery of the posterior part of the tray on one side is then examined. If it is not sufficiently deep and will not carry the plaster high enough, the tray is removed and more composition added to build the tray up to the required height. If the tray is too high, it is warmed over a smokeless flame, immersed quickly in hot water in order to prevent sticking to the tissues, and while the tray is being held firmly in position with one hand, the cheeks are pulled downwards and outwards. By this means, any unrequired composition is bent away by the tissues. The next part requiring attention is against the muscle in the premolar region. The tray is warmed in this area as before described and inserted in the mouth. The cheek is depressed downwards and outwards until the impression of the muscle is reproduced on the tray. The tray cannot then impinge upon the muscle. This procedure is continued all round the tray, after which it should be quite muscle-free. The tray is left unsupported in the palate and the cheeks depressed. If the muscle-trimming has been carried out properly, the tray should not yield to the motion of the cheeks. If it is dislodged, the periphery is examined for intrusion upon the muscle or soft tissue, which is subsequently remedied. The tray is ready for taking the impression after the palatal surface has been scored to afford a hold upon the plaster. The latter is the ideal impression material in this case, since it will yield to the delicate soft tissues of the mouth without offering resistance. "Post-damming" is carried out as usual. A soft mix of impression plaster is made, and a small quantity quickly shaken in the tray. Dabs of plaster are put against the tuberosities and in the centre of the palate, and the tray adjusted in its proper position with a "wiggly" motion. Any slight excess of plaster escapes through the hole in the tray, and does not escape at the back of the tray and fall upon the tongue. When the impression has become quite hard, it is removed by depressing it around the edges. If any fracture takes place, the fragments may easily be replaced in their correct positions. By following this technique, we obtain a muscle-free impression. The denture constructed from it is retained in position by adhesion due to contact between the plate and the tissues over the whole area covered. Conforming is neither required nor desirable.

In conclusion, for a partial case, a standard box tray with plaster or else a special tray with gutta percha should be used. For an edentulous case, always use plaster in conjunction with a special tray. The more difficult the case, the greater is the necessity for a plaster impression. The latter is as easy to use as composition, in fact, often it is easier, since composition is a treacherous material, especially for the beginner. A plaster impression to start with will obviate the remakes which are so prone to accompany a composition impression.

Appointment.

T. Skene Keith, M.B., B.S., Pathologist to the Royal Berkshire Hospital, Reading.

Acute Appendicitis.

CLINICAL LECTURE BY R. P. ROWLANDS, M.S.

GENTLEMEN,—I make no apology for the choice of this subject for my lecture for I am shocked by the knowledge that the death-rate from this disease is appalling and is not diminishing in spite of increasing knowledge. About 2,500 deaths in England and Wales are certified every year to be due to appendicitis.[1] A great many more are due to the numerous complications of the disease, without the primary cause being recognised or certified. This wicked waste of life is all the more lamentable because the victims are mostly young and useful people whose life-work is incomplete or hardly begun, and because timely operations would save nearly all of them. Over 75 per cent. of those who suffer from appendicitis are under 30 years of age. Many who survive without or after delayed operations suffer severely in after-life from the effects of the avoidable complications of appendicitis, such as ventral hernia, chronic constipation, empyema, etc. Better education of medical men and of the public should reduce this shocking mortality and suffering. We should lose no opportunity of teaching that immediate operation is by far the safest and the only satisfactory way of treating acute appendicitis. Without operation the mortality has been shown by physicians to be about 15 per cent.; with operation within 12 hours it is under 5 per cent. That great physician, Sir William Osler,[2] wrote:—

"Gradually the profession has learned to recognise that appendicitis is a surgical disease. The cases should be admitted directly to a surgical ward. Many lives are lost by temporising. The surgeon is often called too late, never too early. There is no medical treatment for appendicitis. There are remedies which allay the pain but there are none capable in any way of controlling the course of the disease."

Rutherford Morrison[3] wrote some years ago that "there would be no percentage of deaths from appendicitis if every case commencing with acute pain and developing tenderness and rigidity of the abdomen and quickening of the pulse were operated on within 12 hours." It must be admitted, however, that some patients do not call their medical attendants in the early hours of their illness, and this accounts for some at least of the deplorable delay in sending these patients to hospital or in getting a surgeon to see them. It is frequently said, also, that the patient will not act on the advice of his doctor, but, it is my experience that, if the true facts of the position are put clearly before him or his relatives, an operation for appendicitis is very rarely refused.

Symptoms and Signs.—The following symptoms and signs strongly suggest acute appendicitis:—

Sudden, intense pain in the middle of the abdomen, often settling later in the right iliac region, with local tenderness, rigidity and, perhaps, swelling later. Sometimes the pain and tenderness may be pelvic. The former is often so severe as to prevent sleep.

Occasionally the appendix or abscess is feelable in the right iliac fossa, or, bi-manually, in the pelvis.

Frequent or painful micturition indicates a pelvic appendix and menstruation may be brought on by pelvic inflammation.

All these symptoms and signs may abate when the appendix perforates or becomes gangrenous and insensitive. This lull in the storm deceives the unwary and is often followed in a few hours by signs of spreading peritonitis. Leucocytosis is usually present, but it is absent in the gravest cases, therefore a blood examination is not often of great practical value and it is wrong to wait for one when the clinical signs call for immediate operation.

Diagnosis.—The diagnosis of appendicitis is not, as a rule, very difficult and it is made easier by the knowledge that it is by far the commonest acute inflammatory disease of the abdomen in patients under 30 years of age. When tenderness and rigidity in the right iliac region, with early fever, are added, the diagnosis is almost certain. These localising signs and fever are absent with attacks of acute gastritis or ptomaine poisoning as also with migraine, but here the unilateral headache, with visual illusions, is characteristic. There is some danger of mistaking appendicitis for renal or biliary colic or the colicky pain sometimes associated with menstruation, especially before the onset of the first period. The position and distribution of the pain in

renal or biliary colic and the absence of fever is usually characteristic; when it is due to menstruation there is generally no fever and the pain and tenderness are pelvic and bilateral. Again, appendicitis may be mistaken for perforation of any of the abdominal hollow viscera, especially for perforation of a duodenal ulcer or Meckels diverticulum or for acute hæmorrhagic pancreatitis, acute intestinal obstruction, tubo-ovarian disease such as twisted ovarian cyst, salpingitis or ruptured extra-uterine fœtation. Attention to the history and careful examination of the patient generally prevents mistakes, but occasionally they are unavoidable. It is fortunate that most of the conditions mentioned are themselves best treated by early operation. This is particularly true of perforation, acute pancreatitis, intestinal obstruction, cholecystitis and ruptured tubal pregnancy. It is very important to examine the patient thoroughly in every case. Failure to examine the urine may lead us to overlook bacilluria with ascending nephritis either alone or complicating pregnancy and this mistake has led to the needless removal of the appendix. It is not always easy to distinguish the onset of enteric from acute appendicitis, and, indeed, the appendix may be inflammed and perforate in this disease.

Prognosis.—With *early* operation practically every patient should recover from appendicitis. With no operation the mortality is about 15 per cent., with delayed operation it is less, but *is difficult to estimate exactly*. We *know*, however, that the total loss of life is appalling and that this is almost entirely the mortality of procrastination and delay. The following are the most common causes of death:—

1. Peritonitis, either diffuse or causing localised abcess in the pelvis, under the diaphragm, behind the ascending colon or anywhere in the abdomen.

2. Septicæmia, and especially septic thrombosis of the portal vein or portal pyæmia.

3. Pulmonary complications, such as pneumonia or empyema.

4. Intestinal obstruction with paralytic distension.

5. Secondary hæmorrhage.

The outlook of appendicitis associated with pregnancy is very grave and Osler[4] quotes Babler as follows:—

"Of 103 perforative or gangrenous cases 89 were operated upon with 36 deaths. Of 14 cases not operated upon all died. Of the 103 cases 80 aborted before or after operation. Of 104 non-perforative cases 50 were operated on with one death; of the remaining 54, 4 died; 13 of these non-perforative cases aborted."

Indications for Operation.—Sir William Osler[5] very truly points out that "the gravity of appendix disease lies in the fact that from the very onset the peritoneum may be infected; the initial symptoms of pain, with nausea and vomiting, fever and local tenderness, present in all cases, may indicate a widespread infection of this membrane." Fortunately, however, our surgical experience has taught us that early operation practically always prevents the spread of infection and ensures a quick, complete and certain recovery. For years I, in common with many others, have taught that it is wise for a good surgeon, whenever possible, to operate as soon as the diagnosis is made or strongly suspected, and the sooner the better. No one can foretell how an attack will end for no disease is so treacherous. Nothing but early operation can remove the cause and set a limit to the infection. No one can say what is going on in the appendix or peritoneum until the abdomen is opened and it is usual to find the disease more serious than was expected, such as a tense, gangrenous appendix ready to perforate at any moment, although the symptoms had abated. *It is far better to look and cure than* to wait and see. Early operation is easy and safe; its mortality when undertaken within 12 hours is negligible. Early operation saves the patient pain, misery, time, money and often life; it saves the medical attendant time, loss of reputation, anxiety and grief from unexpected and unjustifiable deaths.

I will not attempt to discuss here those late cases of acute appendicitis—all too frequent—which the surgeon is called to see after the most favourable time for operation has been allowed to pass. Here it is a difficult matter to decide for or against operation and each case must be judged on its merits. Broadly speaking one may say that:—

1. If the symptoms and signs are definitely and certainly subsiding an operation is generally deferred until about a fortnight after the attack.

2. If the attack is not subsiding or is getting worse it is best for a good surgeon to operate at the earliest opportunity.

Operation.—When the diagnosis is at all certain I strongly recommend the grid-iron incision in the right iliac fossa, a little further out than the outer point of tri-section of the line extending from the umbilicus to the anterior, superior spine. The incision is 4 or 5 inches long and the muscular fibres of the oblique muscles are separated. The incision through and parallel to the fibres of the internal oblique and transversalis always extends for 1 inch into the front wall of the rectus sheath, the rectus being drawn well inwards to give more room. If necessary the deep aponeurosis in front of the rectus can be divided downwards or upwards for several inches without weakening the abdominal wall or dividing any nerves. With an extensive and varied experience I have never failed to get the appendix out through this incision. It gives the most direct access to the caecum and appendix and, even when drainage has to be adopted, it is hardly ever followed by ventral hernia or intestinal obstruction from secondary bands and adhesions, whereas these latter complications are infinitely more common after the Battle or paramedian incisions. After the grid incision the patient is up and about within 4 to 5 days, just as he is after an operation undertaken in an interval, and this without fear of hernia.

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1. Registrar-General's Report to 1920.
2. Osler, Sir Wm.: Principles and Practice of Medicine, p. 537—8.
3. Osler, Sir Wm.: Principles and Practice of Medicine, p. 537—8.
4. Osler, Sir Wm.: Principles and Practice of Medicine, p. 537—8.
5. Osler, Sir Wm.: Principles and Practice of Medicine, p. 535.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The Residents' Theatricals.

"Shall we join the Nurses?"

"Nurses, it is now your duty to encourage, with whatever semblance of mirth you are able to summon up, the feeble efforts of the Residents to entertain us." In putting these words into Matron's mouth, the authors of the Residents' Play exhibited a modesty which their achievement did not demand. A certain senior member of the Staff was heard to say on leaving the Physiological Theatre that it was the "best Residents' Play in the history of Guy's," and this estimate is much nearer the mark. We can unreservedly congratulate the President and Messrs. N. L. Lloyd, who wrote most of the lyrics, and M. E. Shaw, who composed some of the music, joint authors, Mr. O'Meara, the producer (with his indiscreet 'infiltrations'), and the cast generally on the successful and hilarious result of much hard work. Their "Four Râles and a Bruit" had a real plot, designed to give full scope for the amenities of life both in the Nurses' Home and in the College, while the inclusion of the lyrics (printed elsewhere in the GAZETTE) was the feature of the performance. Some of the impersonations, notably those of Mr. Wragge, both in the Theatre and the Colonnade, a Theatre Sister, Dr. Squat, Maydew, Sweetbread, and a Home Sister, were masterly and evoked rounds of recognition and applause.

Our appetites were whetted by a little concert which gave promise of even better things to come Mr. Richards revealed something of the variety of his repertoire in a step-dance. Mr. Carling, who somehow contrives to look his part to the life with the minimum of make-up, scored a palpable hit in "Voilà," while the topical element, of which we were to have so much later on, peeped out in the duet "Ten little Nurses," a crisp and clever little satire.

As Nurse Flurtabit subsequently remarked, "the Residents don't pass the bread nicely and quietly," and when the curtain-raiser was over, we could judge of the truth of her remark for ourselves by studying the picture of dinner in the College which, along with a cartoon of the Physiological Theatre, illlustrated an excellent programme. By the time we had examined the Surgical Confessions, etc., of

Baron Bipp, Dr. John Forceps and Dr. Awful D. Thurst, the curtain was up again, and we settled down to the real business of the evening.

The situation developed in Rale I. was the agreement made by a Head Nurse and a dresser to exchange jobs, Browser betting Nurse Flurtabit two pairs of gloves to one that she would be found out first. Mr. Rogers' female impersonation is so convincing that he must have been doing his rounds lately with his eyes very wide open! We almost forgot it was an impersonation and not a real nurse.

Rale II. introduced us to the dining-room in the Nurses' Home and was the best scene in the play. Two maids (Mr. Carling and Mr. Richards) were discovered making leisurely preparations for breakfast and expressing forcible opinions about "'ole Clutch." Millicent summed up their joint reflections on their lot in the song "I don't like being a ward-maid," which, with its chorus, "I don't look much on weekdays," was the pièce de résistance of the play and fairly brought down the house. She had worked in many wards and she proceeded to compare their respective

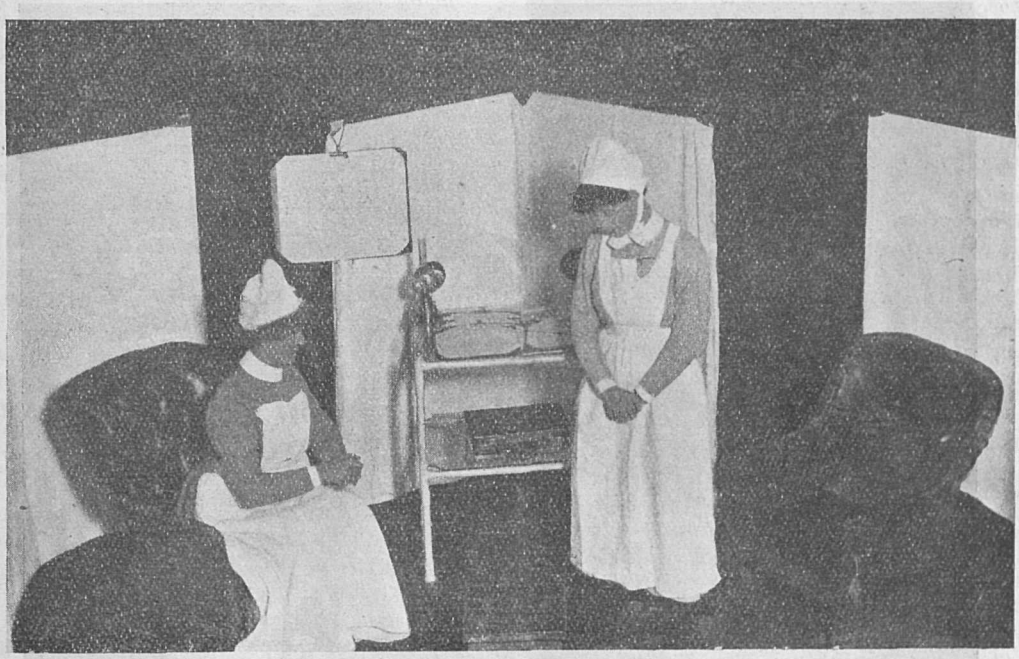

Photo by G. WALKER.

A WARD BY NIGHT.

Upon the exit of the two conspirators No. 18 (Mr. M. E. Shaw), got out of his "blarsted bed, to escape the 'ell of a draught," and began wandering round the ward. Having vituperated the entire Hospital Staff with a most satisfying vulgarity, he plunged into a libellous song which was eventually cut short by the entry of a Night Sister and a stormy interview between her and Browser, now appearing as a Head-Nurse. The curtain came down on Nurse Flurtabit (now a dresser) prompting Browser from behind a screen to show Sister out of the ward with a lamp.

sisters in phrases which dispensed just the right admixture of reality and caricature. Mr. Carling excelled himself: coiffure, accent, manner, matter—admirable! Meanwhile Maggie (Mr. Richards) was doing good "business" with the aid of a penny dreadful. Both here and subsequently in the Colonnade scene we thought his part perhaps a little over-acted, but he was distinctly funny and made an excellent foil to the singer. The nurses now arrived followed by "Sister Umbrella," Nurse Flurtabit of course being late, and wearing her cape and a comb in her hair

("useful for keeping the babies quiet," as she explained to the outraged Sister). Conversation becoming general we had a glimpse of the effect of Browser's impersonation of Nurse Flurtabit on the Home, until Sister intervened with various complaints of indiscipline, including the statement that the College was showing much more economy in the use of hot water than the Nurses' Home! The scene ended with the appearance of Matron (Mr. M. E. Shaw) and a speech from the desk which was a little too long, but cleverly written and very effective with the audience, perhaps because of its audacity. Mr. Shaw enjoyed making that speech, and we enjoyed his enjoyment. It was a piquant dénouement of an excellent scene.

Photo by G. WALKER. BREAKFAST IN THE NURSES' HOME.

Rale III. discovered Dr. Squat asleep in the Theatre, having apparently assimilated so much dope that he had turned dormouse. Two anæsthetists having smashed the X-ray plate which "Scrubby" may presently need, proceed to doctor an old one with black paper and Sinclair's glue. Presently enters Nurse Flurtabit disguised as Browser, and we were treated to one of the best bits of acting in the play. For, mark you, this was not a straightforward case of male impersonation by a woman. This was a man impersonating a woman who in the play herself impersonates a man. And admirably did Mr. Rogers sustain his complicated rôle. Blodgers, the H.S. (Mr. Stoker) entered next, and began a running commentary on the ways of "Scrubby," "Bom Tonar," and things in general. Where did he pick up that voice and manner? The subtle blend of efficiency and boredom made his characterisation distinctive and unforgettable. It was a real piece of artistry, the more so as it was done with such freedom and naturalness. Just as Millicent's song in the last act had provided the occasion for the lampooning of the Sisters, so the Medical and Surgical Staff found now that they were not going to escape. The H.S. began the fun with a song, "Now Scrubby is a Surgeon who is very hard to please," at the conclusion of which "Scrubby" himself entered, full of news about his examining, and, in Mr. Lloyd's capable hands, proved one of the many successes of the piece. The incompetence of

Nurse Flurtabit in the Theatre as a dresser was an unkind cut, and tended to reduce a hitherto admirable scene to the level of mere burlesque. But the Pare clamp episode and the entry of "a Theatre Sister" (it is a pity she wasn't on longer) restored the standard which we had now learned to expect, and the scene went on convincingly to the appendicectomy which "Mr. Wragge" decided upon because it was "a pity to waste so excellent an anæsthetic."

Rale IV. was a polite return for Rale II. The Students, having had a glimpse of the Nurses' Home, the Nurses now saw the inside of the Dressers' Room, and Nurse Flurtabit realised the ambition of her career. Two ward clerks—Droppit and Stoppit, played by Mr. Laver and Mr. MacKenzie—now continued the good work begun in the last Rale, and delighted the audience with a series of lightning sketches of the entire surgical and medical staff, embodied in the song, "When Eason does his Wednesday round." Idiosyncrasies were unerringly "spotted" and voices faithfully reproduced. The song naturally made a great hit, and the victims enjoyed it as much as anybody. The universal thirst that followed the song made Browser a little nervous, but being compelled to drink, he did not desist till he had consumed about a quart of Residents' beer, after which he descended to the surgery to see a case. Maydew, the porter who fetched him, was another of Mr. Lloyd's impersonations, and having accepted an invitation to refresh himself, sang a song about the old days at Guy's in which Sir Arbuthnot Lane (present in the audience) and other distinguished surgeons had a place. The deliberation with which he wiped the froth from his moustache between drinks was most instructive, but still more so was the ruse by which he pretended to forget his words and so secured another drink from the dressers in order to cover his supposed confusion. Really, Lloyd!

The sudden appearance of Breech and Vertex (Messrs. Rosenberg and Annecke) with trouser clips and unshaven chins made a strong appeal to all who have served on the District. They introduced a new atmosphere, Bohemian, but workmanlike, into the medley of Hospital vignettes. They introduced more concrete things as well, having come from Wolseley Buildings! Meanwhile the plot has been moving towards its inevitable climax. The chins of Breech and Vertex were not the only ones in need of a razor. Browser could dress up in Nurse Flurtabit's uniform but could not arrest the growth of his beard, and as Percussit put it "Shaving is rather an unusual practice in the Nurses' Home." Thus was he discovered, and when his fellow conspiritor rushed up from the surgery hotly pursued by a patient into whose head she had been sticking needles, and dropped a powder-puff, the complementary discovery showed that the game was up.

"The Bruit" brought on Sweetbread pacing the Colonnade in respectful and respected majesty. The touch wherein he turned up Mr. Wragge's name on the board when a particulary raucus motor hoot was heard, has, we regret to learn, deeply grieved Mr. Wragge's chauffeur, who was present! Matron re-entered in close and anxious colloquy with the Superintendent and they disappeared into the Office. Two taxis are subsequently ordered by telephone, but on Suture's suggestion the order is reduced to one. Finally, the delinquents appear in their "going away dresses," complete with luggage, and are dismissed by their respective authorities in two well-written and well-sung songs which brought the plot to an end.

Matron had said in Rale II. "I have arranged that either the Assistant Matron or myself shall be present on each night, and it is my wish that no nurse shall give way to laughter unless one or other of us shall have indicated that the subject is suitable for wholesome hilarity" But either stronger steps than that would have been necessary to prevent laughter; or else the authorities would have been giving their indications continuously, for the play was so wholesome and so hilarious that our one regret is that we have to wait a whole year for the next!

TEN LITTLE NURSES.

Sung by Mr. E. T. Lloyd *and* Mr. W. R. Carling.

Here is the tale of ten little nurses,
They came to Guy's one day all feeling so gay;
And the matron said how glad she was
To welcome them to the Nurses home.
She told them how she hoped that they would all be so good,
And ten little nurses said "of course they would."
List to the tale we're going to tell
Of ten little maids who began so well.

Ten little nurses started work
They thought that the life was fine,
But the wind blew hard in the Park one day
And then there were only nine!

Nine little nurses went up West
And one stayed out too late.
She got caught on the fire escape,
And then there were only eight!

Eight little nurses went on night
And eight of them thought 'twas heaven.
One of them landed in Pat and Sam,
And then there were only seven!

Seven little nurses got their stripes,
With lambs they had ceased to mix.
One met a ward clerk in the sub-way,
Then there were only six!

Six little nurses did their duty,
Learnt to make their patients thrive.
One put senna in a patient's tea,
And then there were only five!

Five little nurses got their strings,
It made their chins quite sore.
One went on night in the Surgery,
And then there were only four!

Four little nurses learnt to swim,
They practised after tea.
One went down on a students' day,
And then there were only three!

Three little nurses had a half-day,
And didn't know what to do.
One went to tea with an R.S.O.,
And then there were only two!

Two little nurses went on the district,
Thought it would be such fun.
One of them stayed with an R.O.P.,
And then there was only one.

One little nurse was left on her own,
An Intelligent Tourist she,
So the Chaplain took her out alone,
And she never came back—did she?

Now we've came to the end of the story, that is the tale complete,
Of one little, two little, three little, fly little, four little, five little, six little, shy little, seven little, eight little, nine little, our little, ten little nurses neat.

THE PATIENT'S SONG.

Sung by Mr. M. E. Shaw.

Oh, the life of a hospital patient is hard,
He may be in a desp'rate condition,
But his comfort is being continually marred
By the rounds of the learned physician.
And when at long last, from the wards he has passed,
And has learnt that each patient much worse is,
The H.P.'s go round, and the wards they resound
With the clatter of wardmaids and nurses.

Chorus—

You see many a sight from Cornelius to Bright,
In the wards of a place such as this is,
And they say that at night, tho' its not at all right,
All the wards are resounding with kisses.
But the best things they say only happen by day,
And I know that a wonderful sight is,
To see a clerk cursed by the marvellous Hurst
For not spotting a cholecystitis.

Even worse may betide on the surgical side,
For the surgeons are only called Mister;
And whether they're doctors or not I have tried
To find out, but in vain, from the Sister.
But whatever they are they each keep a large car,
And they order a hot fomentation,
To be put on to us, just to clear up the pus
That follows a big operation.

Chorus—

You see many a sight from Cornelius to Bright,
In the wards of a place such as this is,
And they say that at night, tho' its not at all right,
All the wards are resounding with kisses.
But the best things they say only happen by day,
And I know that I'd very much sooner
Ride in Conybeare's Ford, than walk back to my ward,
After losing my right semilumar.

Now tell me, you sages, who read written pages,
Can anyone answer this riddle,
Why they thought me a dud, till they took off some blood
And got a report back from Biddle.
And what was the piffle indited by Ryffel,
That looked just like Greek Elegiacs;
And wherefore the shout when at last they found out
That I'd had several positive guaiacs.

Chorus—

You see many a sight from Cornelius to Bright,
In the wards of a place such as this is,
And they say that at night, tho' its not at all right,
All the wards are resounding with kisses.
But the best things they say only happen by day.
Have you heard of this surgical hobby?
Number nine's had to part with the half of his heart,
He's just had it resected, by Bobby!

With unparalleled zest they examined my chest,
Till I grew most distinctly infirmer,
Then they sent me to Hunt, who unbuttoned my front
And discovered a cardiac murmur.
Then to make things quite even, they sent me to Stephen
In the lift with a hospital porter.
And they laid half-a-crown that when Beddard came down
He'd percuss my thoracic aorta.

Chorus—

You see many a sight from Cornelius to Bright,
In the wards of a place such as this is,
And they say that at night, tho' its not at all right,
All the wards are resounding with kisses.

Now there's one of the staff whom I've never heard laugh,
He is generally silent and moody.
But they say that the nurses he frequently curses
Are full of affection for Rudie.

THE WARD-CLERKS' DUET.

Sung by Mr. B. L. LAVER *and* Mr. M. MACKENZIE.

When Eason does his Wednesday round
In sports-coat and in flannel trousers;
When Mutch's patients' joints are sound
And when he knows where Tabard House is;
When Poulton starts to demonstrate
In language fit for lowly mortals;
When Philip won't come after eight
To operate within these portals;
When Symonds can't elicitate
A knee-jerk or an ankle clonus;
When Johnny Eyre informs the State
Exactly how he earns the bonus;
When Biff arrives in top hat, tails,
Gloves, stick, and gold-rimmed monocle;
And when the Baron stops the sales
Of "Sunday Times," "Express," and "Chronicle,"
When Frankie talks without his nose
And cannot recollect his cases;
When Slecky's ceased to be verbose
And Chubby can't remember faces;
When Joey Hughes forgets his jokes
And Chapple cannot draw a picture;
When Rudie really tries to coax
A bougie past a fibrous stricture;
When Barber fails to name a rash,
When Ryle we find no longer thorough;
When Bromley grows a fair moustache,
And buys his trousers in the Borough;
When Fawcett fails to feel a spleen,
When from all murmurs Hunt shall spare us;
When Treth shall miss a case he's seen
Of talipes equino varus;
When Beddard finds a perfect chest
With lungs that aren't the least bit phthisical;
When Herbert gives his car a rest
And comes here mounted on a bicycle;
When Ormond ceases to record
The habits of the Borough mother;
When Tubby lectures in a ward
And can't be heard in any other;
When Cameron leaves his spats behind
And D.-C. only golfs on Sundays;
When Molly starts to be unkind
And turns up late for ops. on Mondays;
When Bobby uses forceps for
An *end-to-end anastomosis;*
When Hurst forgets the man he saw
In Addison with ankylosis;
When all these things shall come to pass,
And if the Hospital's still here,
The Park will once more grow some grass,
And Residents will swear off beer!

MAYDEW'S SONG.

(*Tune*—"All dressed up and nowhere to go.")

Sung by Mr. E. T. LLOYD.

I'm afraid that I have a throat so dry
I drink all that comes my way;
And I often sigh for the days gone by
When the beer was on tap all day.
For the Surgery always used to be
In that new Light Department's place,
And we handed out pints of ale and stout
To the policeman who brought the case.

Chorus—

For its years and years since I came to Guy's.
Life is short, and time simply flies.
I've been porter here since the Lord knows when,
And I've opened the door to generations of men.
Though I'm growing stout I'm ever so wise,
Dressers sometimes call me in to advise.
My diagnosis often causes surprise,
For its years and years since I came to Guy's.

Sir Arbuthnot Lane used to make it plain,
When a case he could not spot,
That he needed me in the Surgery,
'Cos I aided him quite a lot.
And I believe Hale-White learned from me one night
Where the colon bacillus lurks,
And I taught Laurie Shaw not to go before
He'd examined the gums and jerks.

Chorus as before.

Now I've heard Newton Pitt to his friends admit
No one knew as much as me.
And he said, with a laugh, "The Consulting Staff
Is the place where you ought to be."
And I must confess that Sir Charters S.
Came to me when he was in doubt,
And he asked me what sort of chance he'd got
When he took an appendix out.

Chorus as before.

THE WARD-MAID'S SONG.

Sung by Mr. W. R. CARLING.

(*Tune*—"I ain't nobody's darling.")

I don't like being a ward-maid,
Its an awful game;
The food is better than the nurses,
But I hate it just the same.
And when you're ill they send for Mutch,
He takes the Panel Fees,
But he stays in bed and sends instead
One of those damned H.P.s.

Chorus—

I don't look much on week-days,
I'm a bit off a sight,
But when I go out walking
I'm a bit of all right.
I always wear silk stockings,
I'm a terrible toff,
And I wash my face in the morning
When I've got an evening off.

There's one thing about a ward-maid—
She's never on night,
But all the latest scandal
I hear at meals all right.
And if you read my diary
You'ld dislocate your eyes,
And say "Well, Margot's bad enough,
But this one takes the prize.

I've been in most positions
From Corny to Queen,
And I really couldn't tell you
Of some of the things I've seen.
For chaps don't notice girls like me
When they come round the wards,
But I could mention a nurse or two
They come to see in hordes.

I used to be in Martha,
But I couldn't stand Stokes;
You ought to see Sister Martha
When she ticks off student blokes.
Another time I worked next door,
But Rollo gets my goat,
It doesn't matter what you do,
She jumps right down your throat.

I used to work in Lydia,
Achurch was there;
But since they've changed the Sister
I'd rather the open air.
For Brenda may be rather small,
But what she lacks in size
She quite makes up in temper—
It's almost the best in Guy's.

I aint been in Isolation,
Nor never in Eyes,
But I dont want a reputation
If I'm to stay at Guy's.
In Eyes you'll find a dark room there—
They keep it dark, all right—
And I hear that in Isolation
There's a duet every night.

I've also worked in Stephen,
And Susie's a sport,
When a student's warded in Stephen
He always has a bottle of port.
Last Christmas when the Clinicals
Had looked on the wine when red,
She caught them trying to kiss a nurse
So they all kissed her instead.

Chorus—
I don't look much on week-days,
I'm a bit of a sight,
But when I go out walking
I'm a bit of all right.
I always wear silk stockings,
I'm a terrible toff,
And I wash my face in the morning
When I've got an evening off.

THE SONG OF THE H.S.

Sung by Mr. G. M. Stoker.

Now Scrubby is a surgeon who is very hard to please,
If you are Scrubby's ward-clerk you must mind your Q's and P's,
You must know the signs and symptoms of every rare disease,
And be able to recite them with rapidity and ease,
And, even if you're right, you'll find that Scrubby disagrees,
For Scrubby is a surgeon, who is very hard to please.

Now Scrubby is a surgeon who is very hard to please,
He knows the face of everyone, each Hindoo and Chinese,
He knows their names and ages, their addresses and degrees,
And lots of things about their past far more abstruse than these,
And everything that happens here I'm sure old Scrubby sees,
For Scrubby is a surgeon, who is very hard to please.

Rugby Football Club.

The "A" team were successful in their match against Catford Bridge on February 3rd, and are now in the final of the Kent Cup. On the 24th they meet the Old Dunstonians at Blackheath.

The "Extra A" XV. have also done well in beating Siemens by 15 points to 3. They are now in the semi-final of the Junior Kent Cup.

GUY'S v. GLOUCESTER.

This popular fixture was duly played at Honor Oak Park on Saturday, January 27th, before a good company of spectators. Both sides were well represented, the visitors being very strong forward, their famous pack including such stalwarts as T. Voyce, S. Smart, Halford, Ayliffe and Major Roderick. At stand-off half was T. Millington, of whom much has been heard this season. Guy's had the assistance for the first time this season of H. Graham-Davies, but had to do without the valuable help of E. H. Fouraker. This player is progressing favourably, but the unfortunate injury which he sustained in the Bristol match will, it is feared, keep him out of the side for some weeks.

Guy's started with tremendous dash and without gilding the fact too much, we were all over the visitors during the first half. Some of the touch finding was really magnificent, and one little bit, when Albertijn gave to Neser to punt to near the corner flag, was very fine. Some good heeling was done, the ball coming quickly to Bekker, and the threequarters got going nicely. The defence became disorganised, and swift passing to Steyn ended in his putting on top speed and crossing the line near the corner. Neser's kick was just wide, but it was a worthy attempt. Van Schalkwijk ran in within 5 minutes. Sprong and Albertijn made the opening, Van Schalkwijk going over with a great final burst. Neser's kick just missed again. Van Schalkwijk, whose play as an attacking force was very fine, was almost in again, it looked as though he might have gone over himself, but to make sure he passed, and a Gloucester man intercepted and cleared.

Graham-Davies had a run from a blind side pass, but he had no real chance this half. His tackling was of great assistance and given a sight of the able, there are few men who go for the line so wholeheartedly.

As soon as ends were changed, it was quite evident that Gloucester were going for us. Their pack were all out and within 10 minutes they had reduced the score, a try accruing from some hand to hand play all the way from midfield, between Millington and Voyce. Well indeed had the Hospital forwards stuck to their job. All had done splendidly. Up against a heavier lot it is no wonder they tired a little towards the end of the game. Zondagh had done his hooking, Holloway and Hutchinson their usual solid game and the rest played nobly. Bekker and Sprong outshone the Gloucester halves. The three-quarters all did well. One would like to see Albertijn a little less anxious to hold on and make more use of his able assistants in the line. If only Badenhorst was a little speedier, both in getting to the ball and in the follow up he would be much more valuable. Steyn and company came to his assistance most opportunely more than once. Bravely did Gloucester try to gain victory, but just as stubbornly did Guy's defend. Neser came out to lend his valuable aid towards the end in holding the fort, and though Gloucester pressed us sorely the defence held and we remained winners by the sufficient but narrow margin of 2 tries (6 points) to 1 try (3 points).

Guy's Team.—W. Badenhorst, C. L. Steyn, J. G. Van Schalkwijk, P. K. Albertijn, H. Graham-Davies, F. Bekker, E. L. Sprong, W. D. Doherty, W. H. Taylor, E. E. Neser, B. G. Scholefield, F. G. Hutchinson, N. M. Holloway, G. Zondagh, H. de Wet Vorster.

GUY'S v. DEVONPORT SERVICES.

On Saturday, February 10th, the Hospital XV. journeyed to Devonport. At the last moment it was found impossible to get more than 14 to make the trip, a forward was therefore lent us on the field. Work in connection with impending exams. depleted our side and many regular players were compelled to stay at home. A glance at the team will tell who were not there. They are almost too numerous to detail, but to those who went, unstinted praise must be given for they defeated the home team by 3 tries to 1 try. The Devonport men were without their three Internationals, F. Gilbert, E. Gardner and G. Luddington, who were playing at Leicester, but for all that we have right to be proud of the victory. Guy's were soon in a good position and to save their line Devonport had to kick out of play. Soon the home team had to defend for all they were worth, but occasionally their forwards got to our end. Then play settled in midfield where Van Schalkwijk got through a bunch of opponents to score very cleverly. A little later Steyn ran over in almost as brilliant a fashion. Neither try was increased to a goal so the half-time margin was 6 points in our favour.

Ends were changed and Steyn put the Hospital further ahead with 3 points, a try which resulted from the famous sprinter running quite half the length of the field. The only other scoring was done by Devonport, Dobbie, who figured in the English trials, being the trygetter. S. R. Trick proved himself quite a useful fullback. The centres were in fine trim, J. G. Van Schalkwijk and C. L. Steyn filling these positions. Neser at half-back once more proved his versatility. The forwards lacked weight, but for all that, well led by Taylor and Scholefield, they proved themselves quite a sufficient handful for the heavier pack opposed to them.

Guy's Team.—S. R. Trick, G. R. Mostert, J. G. Van Schalkwijk, C. L. Steyn, J. Finnemore, F. W. Bekker, E. E. Neser, W. H. Taylor, B. G. Scholefield, F. G. Hutchinson, N. M. Holloway, G. C. Cameron, De Wet Vorster, P. G. Du Toit, A. Harrop.

Hockey.

GUY'S v. WALLINGTON H.C.

Played on Saturday, February 3rd, at Wallington. Won, 2—1.

Guy's pressed from the start and within five minutes the Wallington goalkeeper brought off two excellent saves. Then Schollum got through twice, but on each occasion the goal was disallowed for offside.

Wallington pressed in turn and Reynolds saved; Guy's were not to be denied however, and following some good combination between Hunt and Schollum the latter scored. Half-time arrived with Guy's leading by 1 goal.

The second half was a ding-dong affair, very fast and even, each goalkeeper in turn saving well. Schollum increased Guy's lead by an excellent shot and soon afterwards Wallington scored. From now to the end the Hospital were continually pressing, but failed to add to the score and thus ended the fastest game of the season.

For Guy's Schollum and Hunt were best of the forwards and combined well together, but should have centered more frequently. Bonnalie, Awdrey and Reynolds also did well.

Thoughts of an Unsuccessful Examinee

(While listening to the Residents' Play.)

Oh! students, if you fail to shine along your own selected line; if you are cowed and overawed when up before the Conjoint Board; just think what other arts there be as outlets for your energy.

It may be you have often tried as midwife to be certified; or even hoped to earn one day those magic letters L. S. A.; (For youth's ambitions sometimes tend to compass such an honoured end.)

If, though ambition still soars high, you now feel less inclined to try to satisfy the powers that be ensconced in Queen Square, Bloomsbury, oh, students, make another start and learn the histrionic art.

Reciting blank or rhyming verse, disguised as surgeon, clerk or nurse, you may, with scornful lips upcurled, flaunt their conceits before the world; and this will punish them far more than "left to stomach, right to jaw."

Though Alf. may teach you how to fight and pulverise your foes on sight, such skill could never be displayed at lunch-time in the Colonnade. Assassinations, it appears, have not occurred at Guy's for years.

So if despite your virile brain, the brutes refer you once again, well put it to a better use and write a play of cold abuse, that they, while listening with curses, will wish they'd never joined the nurses.

Pass List.

University of Oxford.

M.B., B.Ch. Examination.

DECEMBER, 1922.

Pathology.

B. G. Scholefield.

Medicine, Midwifery, Surgery.

D. S. Davies.

Royal College of Surgeons of England. Final Examination.

DECEMBER, 1922.

R. B. Chandrachud.
J. F. H. Stallman.
L. C. E. Lindon
V. Wilkinson.

Primary Examination.

DECEMBER, 1922.

C. B. Andrae.
I. C. P. Beauchamp
A. M. Deif.
K. M. K. Duff.
A. S. Gough.
E. J. Greenwood
H. L. Peake.
G. H. Pitt.

Change of Address.

T. Skene Keith, "Morar," Shinfield Rd., Reading. ('Phone: Reading 12.)

G. P. Lindsay, M.C., M.B., B.S., "Thaxted," 5, Smitham Bottom Lane, Purley.

J. W. H. Grice, The Court Hotel, Tientsin, North China.

A. W. Hall, "Rydon," Woodstock Rd., Taunton.

R. B. P. Lansdown, M.B., B.Ch., "Hillbrow," 81, Woodcote Grove Rd., Coulsdon. ('Phone: Purley 827).

Births.

LOBB.—On February 5th, 1923, to Louise Josephine (née Greenall), the wife of E. L. Martyn Lobb, M.S., F.R.C.S., of 11, King Street, Maidstone, a daughter.

GIE.—On December 6th, 1922, at Cape Town, to Dr. and Mrs. J. C. Gie (née Foxon), a daughter (Barbara Joan).

DEBENHAM.—On January 27th, 1923, at Scarborough, to Anna (née Archer Shee), wife of L. S. Debenham, a son.

Marriages.

LANSDOWN—TOWNSEND.—On February 5th, 1923, at St. Mary's, Wimbledon, by Canon Horace Monroe, Robert Blake Poole Lansdown, of Coulsdon, Surrey, to Ermyn Dorothy, daughter of the late John Walter Townsend, of Wimbledon.

O'GORMAN—RABBITT.—On December 26th, 1922, at the Catholic Church, Dehra Dun, India, Nelis O'Gorman, Bengal Dooars Railway, to Clare Kathleen, second daughter of the late Walter Teeling Rabbitt, and of Mrs. Anne Rabbitt, of New Haven, Dehra Dun.

Death.

DAWSON.—On January 19th, 1923, at Borth, Cardiganshire, Janet Katherine, aged 11, the eldest daughter of Reginald and Katherine Dawson, of Willenhall, Staffs.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 904.] March 3, 1923. [Ninepence.

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Passim.

WE publish on page 90 a further list of donations towards the Guy's Hospital War Memorial Fund. As previously announced, a student has promised anonymously £20 to the fund if others will raise the sum of £100. This offer has been extended to the middle of March, and we earnestly appeal to all connected with the Hospital to come forward and give their help. Only £80 more is needed which, with the above offer, will complete the necessary £100. We are assured by Prof. Pembrey, the Hon. Treasurer, that on the receipt of this sum the War Memorial Committee will be able to complete all they set out to do. It is surely not too much to expect that by the middle of next month all Guy's men will have combined in their determination to answer this appeal.

To dream of what one could do with even £60 by winning a Derby Sweep is apt to throw one into fits of ecstasy, but the chance, remote though it may be, of winning £7,500 is too awe-inspiring for words! It is a fact that within a few weeks someone will have been declared the lucky winner of this fortune. Seize upon your chance, then, before it is too late! To-day is the closing day of the great Hospitals' Poster Competition. Yield to the enticing grin of Tso Kay, the Son of Glee, and for the modest sum of 5s. invest in a ticket from the Appeal Office. £7,500! It may be yours, and your meagre five shillings will go to help the greatest of all charities, the healing of the sick and the maimed.

IN a recent issue we published details of some of the work by which the Royal Medical Benevolent Fund Guild are ensuring that orphans and dependents of unfortunate medical men and women should be equipped to help themselves. Part of the work undertaken by the Guild is the placing of children at school and, in general, helping them to finish their education and become efficient wage-earners. For the purpose of enlarging the scope of this excellent work a new scheme has been evolved by the committee of which Lady Fripp is chairman. Each of the great medical schools has a special tradition of loyalty to one or more medical men whose great names are associated with the school. The establishment of scholarships bearing the names of illustrious pioneers by those now connected with a medical school would be a fitting and a perpetual memorial. It is eminently satisfactory that

Guy's is a pioneer in this charitable endeavour. Two, the "Bright" and "Sir Frederick Wills" Scholarships, have already been founded. £250 has been collected for the former, and Sir Gilbert Wills has promised £25 for ten years in memory of his father. In addition, the Governors of Guy's Hospital have awarded a nomination to Christ's Hospital to one of the beneficiaries of the Guild. It is to be hoped that other Medical Schools will take up the running and that before long the Guild will have a long list in the Report of Scholarships in memory of eminent names connected with the medical profession.

The Guild is deserving of the utmost support of the work it is doing, and we hope there are many who will allocate or influence further presentations for the use of the Committee. For services such as could never be adequately paid, the public owes a great debt to the medical profession, and we would thus urge our qualified readers to voice among their patients the educational work which is being undertaken by the Guild.

We are pleased to announce that Mr. W. W. Payne has been appointed the first Parsons Fellow. This Fellowship, as we announced recently, was endowed by Messrs. Ashton & Parsons for the purposes of research into the causation and cure of Diabetes Mellitus. In conjunction with the Medical Research Council, investigations are now being made in the Hospital with regard to the new "insulin" treatment.

Our heartiest congratulations to Mr. Jago whose efforts in the recent Inter-University Cross Country Race were largely instrumental in London University's victory. One of the Birmingham men came in first and managed to keep ahead of his pursuers throughout the race, but Mr. Jago soon followed, leading the London team, whose splendid packing proved a decisive factor.

The Dental Society's Annual Dinner will be held at the Trocadero Restaurant on Saturday, March 10th, at 6.30 p.m., with Mr. J. Lewin Payne in the chair. A few more tickets are still available, and those men who wish to be present should apply as soon as possible to the Hon. Secretary or any member of the Committee.

On Thursday, February 22nd, the Rugby XV. beat University College Hospital in the semi-final of the Hospital Rugby Cup. By the time our next issue appears the great clash with Bart.'s will have taken place. We have been singularly unfortunate throughout the season with our casualties, but we trust that all will be well by March 14. Great preparations are already in hand to ensure an adequate number of loud-speakers on the touch line. It is to be hoped, however, that in the zeal and excitement of pitched battle all supporters will remember the primary object of their visit to Richmond, namely, to watch a Rugby Football match, and that no hindrance will be given to the officials in the punctual start or the course of the game. A greater struggle than usual is sure to take place, and we offer our sincere wishes for the success of our team.

The latest number of the "Guy's Hospital Reports" is reviewed elsewhere in this issue. Special terms of 30s. per annum are offered to students, and we can sincerely urge upon all men not to miss such an excellent opportunity of keeping in touch with the great work which is being done year by year in the Hospital, and which is so well recorded in these "Reports."

We regret that the appreciation of the late Dr. A. H. Fison, promised in our last issue, has been unavoidably delayed, and we hope to publish it, together with a full-page plate, in our next number.

The Guy's Hospital Annual Dance will be held on Friday, April 6th, at Prince's Galleries, Piccadilly. Dancing 9 p.m.—3 a.m. Vassies' Band. Tickets 17s. 6d. each. 35s. double (including supper and buffet), may be obtained from Messrs. B. L. Laver, L. R. A. Wells, E. Wornum, H. K. Williams, L. S. Williams, J. C. Rowbotham, and D. J. P. O'Meara, Hon. Secretary.

By defeating London Hospital 5—0 in the semi-final of the Inter-Hospital Cup, Guy's Association team meet Middlesex Hospital in the final at Crystal Palace ground, kindly lent by the Corinthians' A.F.C., on Tuesday, 13th March.

Publications Received.

British Medical Journal, The Isis, Hospital Gazette, Nursing Times, New Cambridge, Ivory Cross Journal, Burma Medical Times, Indian Medical Record, Medical Journal of South Africa, The Old Cambridge, The Broadway, New York State Journal of Medicine, Deccan Medical Journal, The Northerner (Armstrong College), St. Mary's Hospital Gazette, The Dragon (Aberystwyth), University of Durham College of Medicine Gazette, The Antiseptic (India).

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the Gazette *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Pass List.

Conjoint Board.
Final Examination.

January, 1923.

Medicine.

*V. R. J. de Boissiere.
*H. J. Plowright.
*L. Forman.
J. Jemson.
D. H. Hubbs.
*M. Jackson.
E. H. Koerner.
M. Mitman.
*P. Hack.
*R. J. Hooker.
*E. Orsmond.
*F. S. G. Bonnalie.
S. S. Suzman.
A. F. Percy.
*G. E. Fisher.
*P. G. Sedgwick.
*W. G. Booth.
*E. Joyston-Bechal.
*H. C. Beccle.
*P. G. Harvey.
*H. G. R. Canning.
C. G. Bowen.
T. Wooldridge.

Surgery.

*P. Hack.
*R. J. Hooker.
*E. Orsmond.
*F. S. G. Bonnalie.
N. L. Lloyd.
*G. E. Fisher.
*P. G. Sedgwick.
H. Seelenfreund.
W. A. Brown.
H. P. Baylis.
*J. H. M. Lloyd.
*C. H. Atkinson.
*J. T. Linklater.
*M. Rose.
D. B. Hitchings.
*M. Markiles.
R. G. Tame.
*A. R. V. Patel.
G. D. Shaw.

Midwifery.

J. Jemson.
M. Mitman.
R. Brooke.
L. G. Housden.
M. E. Killard-Leavey.
S. C. Rowbotham.
J. L. Faull.
G. O. Mitchell.
P. M. Moffatt.
G. W. V. Parry.
G. C. Millis.
A. T. W. Powell.
A. Gordon.
M. Weinbren.
J. A. Currie.
D. Vaughan.
G. T. Henderson.
E. R. Boland.
W. A. Brown.

*Have now completed the Examination.

Second Examination.

Part I.—*Anatomy and Physiology.*

C. A. N. Hicks.
F. H. Pratt.
D. W. E. Lloyd.
S. B. Browning.
*W. Nicholls.
F. H. J. Rowley.
H. G. Davies.

Part II.—*Pharmacology and Materia Medica.*

C. A. N. Hicks.
F. H. Pratt.
A. C. Lysaght.
L. R. Jones.
C. L. Froehlich.
H. Kessel.
V. L. Fisher.
J. H. Anderson.

*Anatomy only.

First Examination.

JANUARY, 1923.

Chemistry, Physics and Biology.

Chemistry.

T. H. Felton.
D. K. Weston.
A. Lewis.
M. A. Loutfy.
H. Brown.
G. H. Greenway.
M. H. Rashwar.
F. C. Tomlyn.
E. Robinson.
E. F. S. Dodd.
G. Fellows-Smith.
M. Gerson.
S. R. Howcroft.
F. D. Manners.
A. S. Moore.
G. W. Oliphant.
H. C. Lawrence.
W. J. Badenhorst.
A. E. Farara.
M. Wolman.

Physics.

T. H. Felton.
D. K. Weston.
S. E. Knowles.
A. Lewis.
H. Brown.
G. H. Greenway.
M. H. Rashwar.
F. C. Tomlyn.
G. Escalante.
J. D. Gutierrez.
E. F. S .Dodd.
M. Gerson.
F. D. Manners.
A. S. Moore.
G. W. Oliphant.
H. C. Lawrence.
J. White.

Biology.

D. K. Weston.
A. Lewis.
E. C. Woodhead.
N. L. Barber.
R. V. Bradlaw.
P. Gerrard.
G. N. Lewin.
J. A. Simons.

Royal College of Surgeons.

L.D.S.

1st Examination.

FEBRUARY, 1923.

PART I. AND II.—*Mechanical Dentistry and Dental Metallurgy.*

W. J. Badenhorst.
A. E. Cave.
F. H. Chapple.
J. S. Crapper.
R. L. Denny.
G. E. Glazebrook.
N. Goldthorpe.
J. Hull.
S. A. McLaren.
†F. D. Manners.
E. G. Parsons.
L. G. Pickett.
*E. B. Rees.
L. A. Steel.
F. H. B. Tofts.
*N. M. Holloway.
*H. D. Kendrick.
*H. C. Lawrence.
*W. H. C. Lean.
*H. Myers.
*F. St. J. Powley.
*L. F. O. Seymour.
*De W. Vorster.
†C. B. Boyd.
†L. Cowlishaw.
†A. McEwen.
†A. E. MacLagan.
†E. A. Moss.
†T. T. Oliver.
†C. M. Ross.
*W. J. Barnard.
*J. D. Cambrook.
*A. C. Evans.
*G. E. Graham.
*H. R. Hollis.
†A. G. Taylor.
†A. E. Treweek.
†C. M. Veysey.
†G. V. L. Williams.
†K. H. Wright.

*Mechanical Dentistry only.
†Dental Metallurgy only.

PART III.—(A) *Anatomy and Physiology.*

W. J. Barnard.
W. P. Beresford.
W. E. Berwick.
F. F. Brayfield.
H. B. M. Cahill.
T. O. Clancy.
P. Droomer.
P. J. du Toit.
E. F. Farmer.
C. H. Fox.
W. H. Foy.
F. H. Goddard.
G. W. Goodson.
M. B. Goolding.
G. L. Gould.
M. C. Hart.
R. M. Hastings.
A. Hirschberg.
A. R. Jackson.
A. F. King.
G. B. Longhurst.
A. C. Luck.
E. H. Marshall.
K. F. Pelley.
S. A. Pleasant.
T. N. L. Price.
O. J. Sidi.
F. R. Taylor.
G. G. T. Tregarthen.
T. Vallange.
H. P. R. Williams.

PART III.—(B) *Dental Anatomy Physiology.*

W. J. Barnard.
E. F. Farmer.
C. H. Fox.
G. L. Gould.
A. R. Jackson.
E. H. Marshall.
S. A. Pleasant.
T. N. L. Price.
F. R. Taylor.
H. R. Allen.
R. C. Ballard.
L. S. Carter.
D. H. Couch.
F. G. Davies.
A. H. M. Dyke.
C. H. A. Fido.
L. S. J. Kanaar.
H. Metheringham.
L. Nurick.
J. F. Reynolds.
A. Tuback.

Change of Address.

Dr. J. A. Ryle, 152, Harley Street, W.

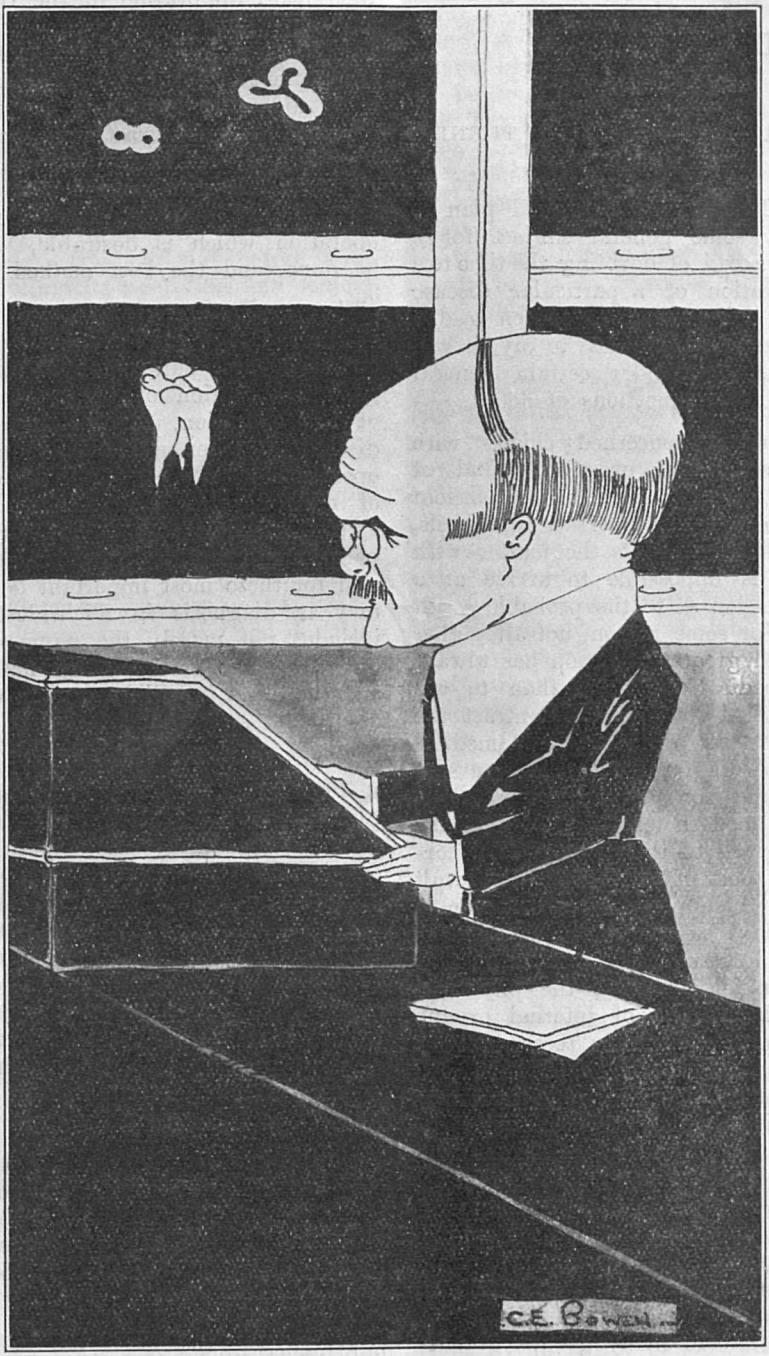
W. F. Colclough, M.D., Cherry Hayes, Sidmouth.

M. Coburn, M.D., Colgrain, Dukes Avenue, Muswell Hill, N.10.

G. B. Cockrem, Surg.-Lt. R.N., 10, The Avenue, Bedford Park, W. 4.

Papers by Guy's Men.

John Fawcett, M.D., and John A. Ryle, M.D. Cases of Delayed and Immediate Anaphylactic Shock: With a note on the Circulatory Phenomena.—*Lancet*, 1923, i., p. 325.



J. LEWIN PAYNE.

The Principles of Surgical Diagnosis.

CLINICAL LECTURE BY MR. PHILIP TURNER.

GENTLEMEN,—It is, I think, a good plan to take occasionally some general subject for a clinical lecture instead of devoting the time to a detailed consideration of a particular disease or injury. The subject I have chosen to-day is a very wide one, and, needless to say, it will only be possible to consider certain general principles, avoiding all questions of detail.

Clinical surgery is concerned chiefly with diagnosis, treatment, and prognosis; and of these the first is the most essential, for efficient treatment depends upon a correct diagnosis, and, unless we know what is the matter with our patients, it is impossible to arrive at a satisfactory conclusion as to the probable result of the illness. For some reason, not altogether easy to understand, greater attention has always been paid to medical diagnosis than to the diagnosis of surgical conditions. Contrast the number of books you will find in a medical library on medical diagnosis with those on surgical diagnosis and compare the space given to diagnosis in a modern text book of medicine with the space given to this subject in a corresponding text book of surgery. The result is very striking. I suppose that one reason is that in former days surgery was largely confined to more or less superficial conditions that could be seen or felt, whereas the physician had to deal with diseases of internal organs giving rise to signs, often only recognised by the stethoscope, and which were capable of very different interpretation by various observers. In support of this view it is interesting to recall that until about twenty years ago it was the custom in this Hospital for practically all abdominal cases, acute as well as chronic, to be admitted to the medical wards under a physician, the surgeon being called in to operate if this was thought desirable by his medical colleague. A little consideration will, however, remind us that in many groups of surgical cases, head injuries, abdominal injuries and emergencies, tumours, of the breast and of the groin, for instance, surgical diagnosis requires as close clinical observation, as careful consideration of signs and symptoms, and as thoughtful application of the fruits of experience as in any branch of medicine. It is also true that, in many of these cases, the life of the patient may depend upon an accurate and early diagnosis. Generally speaking, we may say that the more exact our diagnosis the better we shall be able to decide upon the best treatment; if this should be operative we shall be in a position to judge as to the nature of the operation which is desirable, when it should be done, and the best method of carrying it out.

These last points, viz., the choice of the operation best suited to the disease and the general condition of the patient; the nature of the operation, for instance, in malignant disease whether a radical or a palliative operation is to be preferred, and the choice of method, often demand greater knowledge and judgment than is called for by the actual performance of the operation; and the foundation for these most important decisions is accuracy in diagnosis in its widest sense, which includes not merely the name of the disease, but also a recognition of its nature, its extent, and the effect it will have upon the patient, his occupation and mode of life, and the ultimate result.

Accuracy in diagnosis depends in the first place upon a consideration of the history of the disease or injury and of the symptoms, together with the signs observed in the course of a careful and thorough clinical examination. The value and significance of these objective signs, and the importance attributed to each, depend upon our knowledge of other branches of medicine and surgery; anatomy, both normal and morbid; physiology; and pathology. The whole of the information thus obtained is then viewed and reviewed in the light of clinical experience.

Until about thirty years ago this was the only method open to the surgeon. It is still the essential foundation and basis of diagnosis, but there are now various additional or accessory means of diagnosis, often of great, or even supreme value, which, though now in constant and daily use, were not available to our predecessors.

To get an idea of what can be accomplished by sound and careful clinical observation, one cannot do better than look through John Hil-

ton's book on "Rest and Pain." The lectures on which this book is founded were delivered some sixty years ago, before the days of antiseptic surgery, long before the tubercle bacillus was discovered, and when the whole science of bacteriology was in its first infancy. Naturally much of it is hopelessly out of date and many of his inferences seem to us either obvious or very far-fetched. Yet it is a surgical "classic" and can be read with advantage at the present time because it is an outstanding exposition of the method I have tried to put before you, namely, careful clinical observation and logical deductions and inferences from the facts observed. Nothing is so trivial as to escape observation; nothing is so unimportant as not to require an explanation. This should still be the way in which we approach the consideration of the surgical problems of to-day.

For diagnostic purposes, signs which can be recognised by the surgeon on clinical examination are of greater value than the subjective symptoms described by the patient, though the latter should never be overlooked. The symptoms of a disease may vary; the descriptions by different patients of similar symptoms may vary to a still greater degree; pain, for instance, is a symptom that depends to a considerable extent upon temperament; the history of the trouble given by the patient may be absolutely misleading, not wilfully so, but there may be a confusion of times and dates, and the history may differ from time to time.

Only recently, for instance, where for the purposes of diagnosis the duration of symptoms was of the greatest importance, on three separate occasions this was stated by the patient to be two months, three months, and nine months. Practice and experience will enable us to select the important and essential things from the mass of unimportant details.

Sometimes the diagnosis has to be made upon the history alone without any help from objective signs that can be recognised by the surgeon. These cases often present considerable difficulty. At out-patients it is, for instance, by no means unusual for a patient to give a history strongly suggestive of attacks of subacute appendicitis, and yet on examination between the attacks there may be no pain, tenderness, or other physical sign. Sometimes in such cases we have the advantage of the opinion of a medical man who has seen the patient in one of the attacks, and our difficulty is then greatly diminished. Another common instance is for a child to be brought who is supposed to have a hernia. Often we have the mother's account of the swelling, but nothing abnormal can be found on examination. Each of such cases has to be treated on its merits. In the latter it will obviously be advisable to keep the patient under observation until the swelling is seen, when its nature will be easily recognised. In the former we must judge from the type of patient and the history given as to whether it is desirable to keep him under observation or to recommend operative treatment on the history alone.

It will now be necessary to consider what may be called the accessory methods of diagnosis which have become available as the result of the great advances in medicine and surgery during the past twenty or thirty years. These may be divided into two groups: A. A non-laboratory group including X-ray examinations and exploratory operations; in both these the investigations are carried out on the living patient himself. B. A laboratory group including bacteriological, chemical, and histological examinations; in these the investigation is not carried out on the patient, but on materials produced by him, the examination being commonly carried out by someone who has little or no personal interest in the clinical features of the case.

All these methods are in common and daily use, and it is difficult for us to realise the time when they were not available. To all intents and purposes none of these methods were at the service of John Hilton.

We have now to consider the way in which these accessory methods should be employed. First of all, our diagnosis should not rest upon information derived from these methods alone. The findings of the bacteriologist, radiologist, morbid histologist, and clinical chemist are often of very great importance; any of them may be, and often is, the deciding factor in making a diagnosis, but they should be considered in conjunction with the history, symptoms, and all the signs observed on clinical examination. After having made the latter, let us by all means employ every other method which may be of assistance. The more we can find out about our patients and the more accurate our diagnosis the better it will be for

them and the easier our task in deciding upon and carrying out the treatment. Generally speaking, the results obtained by these methods should be used as evidence to be fitted in with all other information bearing on the case. They may be of decisive importance, but remember that they have their limitations. A disease is the reaction of the living tissues of the patient to some cause, either known or unknown. The cause and the effects can be investigated in the laboratory; the living tissues of the patient cannot.

Strangely enough, these methods often seem at first to have had an adverse influence on the attention paid to clinical observation, and hence on surgical diagnosis. The attitude adopted was often as follows: Here is a lump which clearly ought not to be present; why not cut it out and have it examined histologically? Here is a patient with some abdominal trouble; why not do an exploratory laparotomy and see the trouble that is present? Or in another patient the trouble may be tubercle or syphilis; why trouble about the clinical characters of the case? Let us send for the bacteriologist and see what he finds.

I am glad to say that these slipshod methods, not very creditable to the surgeon, and not in the best interests of the patients, have largely passed away, and that by the careful and correct use of the accessory methods, surgical diagnosis has very greatly benefited and improved.

While speaking of accessory methods of diagnosis, it will be necessary just to mention the help obtained in certain special cases by such instruments as the laryngoscope, the cystoscope, the sigmoidoscope, and the ophthalmoscope. These are largely, and some of them chiefly, used in certain special branches of surgery, but it is certainly advisable, from the point of view of general surgery, for us to have some knowledge of their use for purposes of diagnosis. In a large hospital we can readily get a specialist to give his opinion, but the general surgeon ought to be sufficiently self-reliant to be able to use these instruments himself, or to verify the opinions of others in making his diagnosis.

It will now be necessary to consider in some detail how these special diagnostic methods should be used, the nature of the information we may gain from them, their relation to routine clinical investigation, and their limitations.

X-ray Examination.—The information derived from this method is so great that in many cases it may be said to have revolutionised surgical diagnosis. It will be noticed that it is not a laboratory method, for it is directly applied to the living patient, and that not only is it a method of diagnosis, but also furnishes a permanent record of the disease or injury from which the patient suffers, and, in addition, in fractures, for instance, affords information as to progress and the result of treatment. At first applied to the diagnosis of fractures, it rapidly extended to the investigation of joints, foreign bodies, including urinary calculi, and diseases of soft parts, especially of the abdominal and thoracic viscera.

Though our indebtedness to the radiologist is great, and will doubtless increase, it is, however, necessary to point out that there are certain limitations and cautions to be applied to the information which he can afford us. In the first place, a diagnosis should not rest upon an X-ray examination alone; it does not replace a consideration of the history, symptoms, signs, and the information obtained from the general clinical investigation. Even in the case of fractures where the information given by the radiologist is of supreme importance, this should be our invariable rule: we should endeavour to make our diagnosis as accurately as possible and then improve or amend our idea of the condition present in the light of the information afforded by the X-ray plate. Where the disease affects the soft parts, the abdominal viscera or some thoracic structure, for instance, it is of even greater importance to consider the result of the X-ray examination with the results of all other investigations and of all other facts and evidence bearing upon the case. It may here be pointed out that as this method is a clinical method of examining the living patient, the radiologist should be given for his guidance the chief clinical features of the case, and, as you know, Mr. Redding is always anxious to hear what has been found at the operation on patients whom he has examined. We should always see and examine the plates ourselves, bearing in mind, however, that the shadows seen may be difficult of interpretation and that then the experience of the radiologist will be of the greatest help. It must be remembered, too, that positive information is of

much greater value than a negative finding except, perhaps, in diseases and injuries of bones. For instance, a patient has an X-ray examination after a typical attack of renal colic and no stone is seen. This does not necessarily mean that no stone is present. It may be composed of pure uric acid which is completely translucent to X-rays, or it may be a small one and its presence conclusively proved by being subsequently passed per urethram.

It is interesting to consider the vast change brought about by systematic X-ray examinations in the diagnosis of fractures. Before this method was available, the diagnosis had to be made by other means, particularly by obtaining crepitus, abnormal mobility, deformity, shortening, and alteration in the relationship of bony landmarks. As regards the first of these, seeking for crepitus is a very painful process for the patient and it is certainly a good thing that it is no longer regarded as one of the essentials for making a diagnosis. But as regards the others, I think it is a pity that less attention is given to them than formerly. The deformity, the use of the tape measure to ascertain the amount of shortening and alteration in the relative positions of bony points, which should precede the X-ray examination will, in the case of the limb bones at any rate, usually enable us to make a diagnosis. The X-ray examination which, of course, should always be made, will give us additional information as to the type of fracture and the position of the fragments which will have such an important bearing on treatment and prognosis. Many fractures can only be definitely diagnosed as the result of the X-ray examination; such, for example, are fractures of the carpal bones which are now recognised as not uncommon injuries, but which, before this method was available were almost invariably overlooked and regarded as sprains of the wrist joint. A further important use of information derived from the X-ray examination, viz., to see whether the fragments have been manipulated into position and to help us to decide as to the desirability of operative treatment is beyond the scope of our present subject and need not be further discussed.

Lastly, do not have an X-ray examination made or repeated when it is not really necessary. Radiology is an expensive "placebo," and by attention to this rule you will save the radiologist from unnecessary work as well as the Hospital from needless expense.

The Exploratory Operation.—The best and most commonly employed example of this is the exploratory or diagnostic laparotomy. A true exploratory operation is occasionally called for in other regions of the body. A gland or a small portion of a growth may be removed for microscopical examination, but here, strictly speaking, the diagnosis depends, not upon the operation, but upon the report of the morbid histologist.

The rise of this method of diagnosis was largely the result of the great developments associated with antiseptic and aseptic surgery. Many an operation, which in the pre-antiseptic days was a formidable undertaking attended with a great mortality, became a comparatively trivial proceeding, almost devoid of danger. Under these circumstances there was a great temptation to operate in an obscure case for the purpose of finding out what was the matter with the patient, especially as the other accessory methods of diagnosis, X-ray examinations, for example, were then either unknown or in their infancy. This tended to lead on to the attitude that it was not necessary to take much trouble over the diagnosis of an obscure abdominal case and that it was better to do an exploratory operation and see the condition that was present. In this way the great improvements and developments in operative surgery had, at first, to a certain extent, an adverse effect on surgical diagnosis. This attitude is largely a thing of the past, though I am afraid that it has not yet entirely disappeared; better methods are now available for the diagnosis of abdominal and other diseases which formerly called for exploratory operations, and the probability is that we shall see still greater advances in this respect. An exploratory operation is still occasionally called for, and I suppose this will always be the case. Let us remember that, as a rule, an exploratory operation should not be done for diagnosis alone, but only when there is a reasonable chance of finding some lesion which requires radical or palliative operative treatment.

In a sense a large proportion of operations for acute abdominal emergencies are exploratory, for the nature of the emergency is often in doubt until the condition is actually seen during the operation. The state of the patient is so serious, however, that the operation must be performed without wasting time by applying any of the accessory methods of diagnosis. Remember that on this account a median or

para-median incision is desirable in such cases. Sometimes it is difficult to decide whether a true abdominal emergency is present or not. In some cases it will be possible to settle this by keeping the patient under observation; in others, owing to the vital importance of immediate diagnosis and treatment it may be desirable to carry out a purely exploratory operation. If under these circumstances no emergency, or rather none requiring operative measures, is found, the surgeon will have nothing with which to reproach himself, provided that the case has been fully considered and definite indications for an exploration have been found. It is far better in such cases to operate and find nothing than not to operate and for the patient to die with some condition which might have been successfully treated by an operation.

An exploratory laparatomy is also occasionally called for in certain chronic abdominal troubles in which the diagnosis remains uncertain after full investigation. As examples one can mention patients suffering from persistent jaundice which may be due to an impacted gall-stone or to a growth in the head of the pancreas and patients with chronic dyspepsia in whom there is no evidence of gastric ulcer and in whom it is thought that the symptoms may be secondary to chronic appendicitis.

In exploratory operations it is essential that the operator shall know what diseased conditons to look for and how to recognise them when he sees them. Experience, and the study of what Sir Berkeley Moynihan has described as "living pathology," are necessary to do this both quickly and with certainty.

Bacteriology.—We have now to consider the nature of the help we may get from the bacteriological laboratory. This includes (a) information obtained by direct recognition of the infecting organism; (b) information derived from serum and other reactions. Important as the information thus obtained may be, it is, perhaps necessary, again, to point out that it must not be allowed to take the place of the systematic clinical investigation, but must be considered with it. In certain cases, even though the diagnosis may be confidently made on general clinical grounds, bacteriological confirmation should always be obtained. In anthrax, for example, even though the pustule may be absolutely characteristic, the bacillus should always be identified. This is partly to comply with Public Health requirements, for it excludes any possibility of mistake, and partly because serum treatment may be considered desirable. Bacteriological verification of the diagnosis should, on similar grounds, be obtained in diseases such as actinomycosis and glanders. In a somewhat similar fashion the recognition of the spirochæta pallida in scrapings from the sore may be employed for the confirmation of the diagnosis in atypical syphilitic lesions, such as extragenital chancres.

In many surgical infective diseases, such as acute infective arthritis, acute infective osteomyelitis, and acute peritonitis, a variety of pyogenic micro-organisms may give rise to closely similar results. Though not necessary for the diagnosis in the way that the recognition of the bacillus anthracis clinches the diagnosis of anthrax, it is, however, most desirable that the infecting organism shall be identified. In acute infective arthritis, for example, a number of organisms may be found in different cases; the trouble may be due to staphylococci, streptococci, pneumococci, the bacillus typhosus, and even to gonococci or the tubercle bacillus. It is obvious that a knowledge of the organism will have an important bearing on both treatment and prognosis. Septicæmia, empyema and pyelitis are other common conditions where a knowledge of the infecting organism is of great importance in completing the diagnosis. It must be remembered that these bacteriological methods have certain limitations; in common with other laboratory methods they are not concerned with the living patient, and hence do not take into account the power of resistance and power of reaction which vary within wide limits in different people. Sometimes the organism may be difficult to identify; in other cases the original infecting organism may be overshadowed by a secondary infection. Recently, for example, I have had a case which clinically was a pneumococcal peritonitis in a small girl; the organism present could not, however, be identified with certainty.

Some little time ago I had a patient who was admitted with, and operated upon for, acute appendicitis with spreading appendicitis. Bacteriological examination of the pus showed, as was expected, the presence of bacillus coli. Some months later the patient, who had never

really entirely recovered, was re-admitted with actinomycosis of the liver and lungs. A sinus had persisted from his original operation, and the pus from this showed typical actinomycosis granules, which were also present in the fæces. Here there is little doubt but that the original trouble was actinomycosis of the appendix and that it was masked by a secondary bacillus coli infection.

Of the various serum reactions the Wassermann is of the greatest help to the surgeon. The Widal reaction is occasionally necessary in the diagnosis of some of the surgical complications of typhoid fever. As an example of this, I once operated upon a case of perforated typhoid ulcer occurring in an ambulatory and undiagnosed case of typhoid; the patient recovered, but a positive Widal confirmed the diagnosis. Another type of diagnostic method which may be mentioned here is the tuberculin reaction (Calmettte and Von Pirquet. This, though sometimes of value, is not often called for in the diagnosis of surgical disease and is now less frequently employed by physicians. With regard to the Wassermann reaction, it must be pointed out that as a diagnostic method it is of less service than would appear on first consideration. As a general rule, syphilitic lesions, at any rate those which are usually regarded as surgical, can be confidently diagnosed from their clinical characters. A positive Wassermann reaction will confirm the diagnosis in that it shows that the patient is a syphilitic subject, but it does not necessarily follow that the lesion in the syphilitic patient is a syphilitic lesion. For instance, tertiary manifestations of syphilis in the tongue are very frequently observed, and it is well known that an epithelioma may develop in the resulting scar. In such a case, where, perhaps, there is a suspicious induration or ulceration, a positive Wassermann will tell us that we are dealing with a syphilitic patient; it will not tell us whether the suspected spot is malignant or not.

The same is true of other regions of the body. Some time ago I was asked by Dr. Ryle to see a patient with well-marked locomotor ataxy who gave a positive Wassermann, and suffeed frrom severe gastric symptoms. At first it might appear probable that patient had gastric crises, but further consideration and examination, including test meal and bismuth and X-ray, showed that a definite gastric lesion was present. At the operation there was found a large gastric ulcer on the point of perforating. Here, in a syphilitic patient, was a serious, deep-seated, non-syphilitic lesion which, without thorough and complete clinical investigation might have been overlooked. It is important to remember that the Wassermann recation besides being a diagnostic method, also gives most valuable information as regards treatment and its results. While speaking of the limitations of this reaction, it is necessary to say that one does, occasionally, see a case where there is a lesion, apparently syphilitic, and which even improves on anti-syphilitic treatment, but in which the Wassermann reaction is negative.

It will be seen that we obtain great help from the bacteriological laboratory in diagnosis, that this has steadily increased, and that in the future we may look forward with confidence to further great advances.

Morbid Histology.—Let it at once be said that we should, as a rule, regard the report of the morbid histologist as affording a final and definite confirmation—or otherwise—of a diagnosis already made, and as a permanent record of the nature of the disease. There are, however, certain cases where it is desirable that this information should be before us when we are deciding upon the necessary treatment. This is especially so in early cases of malignant disease where the operation will be extensive and will probably necessitate a severe mutilation. For instance, in the case of the tongue, it is often impossible to decide from its appearance whether a small indurated ulcer or fissure is traumatic, syphilitic, tuberculous, or an epithelioma. Histological examination of an excised portion is often the only way of certainly determining this vital point.

Other examples are sarcomata of bone, which will call for a high amputation, and doubtful tumours of the breast. In such cases, especially in the last-mentioned, a frozen section can be cut and examined and a report given in a few minutes, so that, if necessary, the complete operation can be at once proceeded with without submitting the patient to a second anæsthetic. This method is, however, less used than formerly and, as a rule, the surgeon, in consultation with the pathologist, can decide the question of malignancy from the macroscopic appearance of the tumour.

It is often a matter of considerable importance to clear up the diagnosis in patients who have an extensive enlargement of lymphatic glands of uncertain cause. In such cases it is often possible for a superficial gland to be excised with a local anæsthetic, and the diagnosis will then rest upon the report from the histological laboratory. Sometimes, of course, the report of the morbid histologist will show that our diagnosis has been wrong and will throw an entirely new light upon the case. Just recently I have removed a mass from the axilla which had suppurated and was thought to consist of a number of matted and breaking-down lymphatic glands, though the source of infection was not obvious. When examined by the microscope this proved to be an accessory axillary breast in which mastitis had occurred. On the other hand, histological examination is sometimes misleading, usually because an atypical or unsuitable portion of the diseased tissue has been selected for examination.

Clinical Chemistry.—The clinical chemist is chiefly of help to the surgeon in the diagnosis of diseases of the stomach and of the urinary tract. In the latter the examination of the urine is of such importance that a consideration of this is essential before a diagnosis can be made. In these diseases a blood-urea examination, with possibly a urea concentration test, together with an examination both qualitative and quantitative of the urine from each kidney, may be necessary before the diagnosis can be regarded as complete and before the necessary treatment can be determined. In the former the fractional test meal, combined with a bismuth and X-ray examination, is essential before a diagnosis can be made. Most important of all it is of service in the early diagnosis of gastric disease, especially of carcinoma, and thus improves the prospect of successful operative treatment. It must be admitted that fallacies are possible in these examinations, not the fault of the clinical chemist, but due to the idiosyncrasies of the patient. It is, therefore, important to make our diagnosis, not on the findings of the clinical chemist alone, but after considering his report with the result of other methods of investigation, especially that of the radiologist, and with the history, symptoms, and physical signs found on the general clinical investigation of the case.

Another investigation which is undertaken by the clinical chemist and which may have a diagnostic significance is the determination of the coagulation time of the blood. In cases of hæmophilia and where there is an undue tendency to bleed this may have an important bearing both upon the treatment and prognosis.

Having considered the history and symptoms, together with all the facts elicited by general clinical examination and special investigations, we are now in a position to make a diagnosis.

The following general principles are of great importance in the practical application and significance of the facts which are before us.

1. In making a diagnosis do not concentrate all your attention on the disease; always take into account the general state, condition and appearance of the patient. Age, sex, whether married or single, occupation, may all have an important bearing not only on diagnosis but also on treatment. For instance, in a female patient with abdominal trouble the possibility of this being due to disease of the pelvic organs ought to cross our minds. In many cases it can be put out at once, but the very fact of remembering the possibility will prevent many diagnostic mistakes. Notice whether the patient is obese or spare, whether wasted or cachectic. Make enquiries with regard to these or any other unusual feature or peculiarity which may be noticed. Any of these points may be of considerable diagnostic significance, for instance in the differential diagnosis of an innocent and a malignant tumour. In children remember that the history may be unreliable and that often, in foreign bodies in the nose, ear, and respiratory passages, for instance no history may be obtainable.

2. Remember that in many cases a definite diagnosis cannot be made at the first examination of the patient; further observation, or some of the more elaborate methods of investigation already described, may be first required. Under these circumstances we should make a provisional or working diagnosis, reserving the right to alter it in the light of any further information that may be obtained. Here an excellent plan is to follow the method used in military hospitals. In the army a diagnosis has to be made when the patient is admitted to hospital; it is recognised, however, that at first this may be provisional, a fact which is indicated by the use of the letters N.Y.D. (Not Yet Diagnosed) which are put

before, if the tentative diagnosis is a disease, and after, if the most prominent symptom is indicated; for example we might make a provisional diagnosis of N.Y.D. Cholecystitis or Hæmaturia, N.Y.D. The provisional diagnosis is allowed to stand for three days by which time it is expected that a definite diagnosis will be made. I think that it would be a good thing if this plan could be adopted in this hospital. It would prevent delay in admitting acute cases if it were recognised that in many of them only a provisional diagnosis is possible in the front surgery, while with out-patients it reminds us on a second attendance of the patient that a definite diagnosis has not been made and suggests that further investigation is desirable.

3. In an obscure case always endeavour to explain the whole of the signs and symptoms as the result of a single pathological condition, or in other words always be unwilling to diagnose two separate and independent diseases in the same patient.

On the other hand it is necessary to bear in mind that two distinct pathological conditions do sometimes occur. The following is an example of this: Last year a boy, aged eight years, was admitted with the typical signs and symptoms of an abdominal emergency. On examination a well-defined tumour the size of an orange could be felt in the lower part of the abdomen. It was naturally assumed that there was some connection between the urgent symptoms and this lump which was thought to be either an appendix abscess, a mass of tuberculous glands, or an intussusception. At the operation the tumour was found to be a degenerate and cystic left kidney situated about the level of the pelvic brim. As the right kidney was present and hypertrophied the cystic organ was removed. On examination nothing was found in it to explain the acute symptoms; it had certainly been there many years and was probably congenital. On further search being made an acutely inflamed appendix containing pus was found. This afforded the explanation of the acute symptoms and it had, of course, nothing to do with the old-standing disease of the kidney

4. Endeavour to make a real diagnosis—not to name some prominent sign or symptom and regard that as a diagnosis. Strictly speaking, many maladies regarded as definite diseases are really local or late manifestations of some more general trouble; it is even possible that this may be true of cancer. If you look at some of our old volumes of clinical reports you will come across such diagnoses as peritonitis, hepar auctum, febricula, and others. We now recognise that these are symptoms or effects, not diseases. Are we sure that fifty years hence some of our present diagnoses may not excite equal surprise? gall-stones, for instance, or osteo-arthritis, or even gastric ulcer. Sometimes the disease leads to some such striking and important result that, though strictly speaking this is a sign or symptom, the diagnosis is applied to it and the real disease, though known, is only implied: senile gangrene is an example of this; it is really the result of extensive disease of the arteries.

5. I should like again to insist upon the importance of early diagnosis and of investigations into the origin, commencement and early signs of disease. Many diseases, in their early stages, where diagnosis is difficult and the trouble apt to be overlooked both by patient and surgeon, offer good prospects to treatment, but in their late stages, where diagnosis may be easy, treatment may offer little or no chance of cure or even relief. Early diagnosis is of supreme importance in cancer and this offers a great opportunity for investigation and research. Every carcinoma, in any situation, and of any organ, must have a commencement, and with our present knowledge we may assume that even the most serious forms must go through a stage when they are small and what is most important, localised. In many, the tongue for instance, this stage is short, but in others, for example the lip it is longer. It the disease could be diagnosed in this very early stage, surely we might hope for vastly improved results of treatment. As an example one may mention the earlier diagnosis of malignant disease of the stomach. A few years ago it was almost an axiom that if carcinoma of the stomach could be definitely diagnosed it was inoperable. As you know, by the methods which have been indicated, diagnosis can now be made at a much earlier stage and we can hope for still greater improvements. But in other directions, carcinoma of the buccal cavity, of the rectum, and of the breast, for instance, there are great opportunities for improvement in the means of early diagnosis.

In conclusion let me give the following general hints and warnings:—

1. Make it a rule not to act upon a diagnosis made by some one else. Always before doing so confirm the diagnosis yourself.

2. Don't ascribe unusual symptoms or those you don't understand to neurosis, especially at the first examination of the patient. Remember that it is quite possible that serious organic disease may be present in a highly neurotic patient.

3. Never regard a patient as a malingerer until you are sure; this should be suspected rather than diagnosed, especially when the patient is first seen. It is a good plan in such cases, as well as in cases of suspected neurosis, to make a most careful examination to exclude any organic disease, and then to make use of another useful army diagnosis, N.A.D. (No Appreciable Disease).

4. In making your diagnosis always remember probabilities. Don't go out of your way to diagnose some very rare and improbable disease. This is a good rule to bear in mind in surgical clinical examinations.

5. Avoid what I believe in America is called the "Sherlock Holmes" method of diagnosis, that is to make a smart diagnosis from the recognition of some characteristic sign or symptom without investigation. When it comes off it may be impressive, but when it does not the effect is apt to be ridiculous.

6. When you come across any unusual sign or symptom do not think that because it is not mentioned in books that it is unimportant, or is a "neurosis." Endeavour to find an explanation, bear it in mind, and look for it again in any other similar cases. This is a great way of increasing one's clinical experience.

7. Remember mistakes in diagnosis—your own as well as those of other people. This will help you to avoid similar mistakes in the future. Lastly treasure up examples of good diagnosis, especially the methods by which they were made. Even if you should not happen to meet with a similar case the method adopted will certainly be of service to you in other difficult cases.

Guy's Hospital War Memorial Fund.

Further Donations.

	£	s.	d.
Amount already acknowledged	5,395	18	4
Major Thomas	2	2	0
Dr. R. G. Hicks	1	1	0
Dr. E. Penny	1	0	0
Dr. H. J. Spon (third instalment) ...	10	10	0
Anonymous	5	0	0
G. H. Bedford, Esq. (final instalment)	10	0	0
Dr. A. Wills (further donation)... ...	2	2	0
Dr. F. D. Saner	3	3	0
C. Heygate Knowles, Esq.	2	2	0
E. M. S. J.	1	1	0
Dr. E. E. D. Gray	1	1	0
G. W. Gathergood, Esq.	1	0	0
G. E. Halstead, Esq.	1	1	0
D. V. Halstead, Esq.	1	1	0
O. Halstead, Esq.	1	1	0
E. Fish, Esq.	1	1	0
Dr. R. E. G. Phillips	1	1	0
W. E. Fox, Esq.	0	10	0
G. H. Aylen, Esq.	2	2	0
"One of the Rest"	0	2	6
Dr. T. Brice Poole (second donation)	2	2	0
Lt.-Col. S. A. Ruzzeh	1	1	0
J. W. Sendoe, Esq. (further donation)	1	1	0
A. Zorab, Esq. (third instalment) ...	5	0	0
	£5,453	3	10

Guy's Hospital.

Abstract of Summary of Anæsthetics and Operations for the year 1922.

The number of cases in which general anæsthetics were administered was 8,463, among which were 66 intratracheal insufflations of ether, and 11 intratracheal insufflations of ether plus a general anæsthetic. Spinal analgesia was also employed on 9 occasions, and on 44 occasions spinal analgesia followed by a general anæsthetic. On 8 occasions intrapharyngeal ether was employed, and on 3 occasions intrapharyngeal ether plus a general anæsthetic. The total number of operations was 8,049 in wards (Bright Ward excepted), special departments, out-patient departments, and surgeries. There were four deaths which were reported to the Coroner as possibly being due to the anæsthetic.

There have been 8,592 cases of general anæsthesia in the Dental Department, 7,112 under nitrous oxide gas, and 1,480 under ethyl chloride.

Operations done on the medical side are entered under the assistant surgeons corresponding to the physicians or assistant physicians in charge of the wards, the table below showing how many operations are actually performed in these wards:—

ANÆSTHETICS.

A.C.E.	1
C.E.	411
Chloroform	143
Ethanasal	5
Ether (including Gas and Ether)	159
Gas and Gas and Oxygen	1273
Intratracheal Insufflation of Ether	66
Intratracheal Insufflation of Ether and a General Anæsthetic	11
Intrapharyngeal Ether	8
Intrapharyngeal Ether and a General Anæsthetic	3
Spinal Analgesia	9
Spinal Analgesia followed by a general Anæsthetic	44
Other Anæsthetics and Sequences	6339
	8472

ADMINISTRATION OF ANÆSTHETICS.

Staff Anæsthetists	1969
Visiting Staff	224
House-Officers	5826
Other Qualified Men	453
	8472

OPERATIONS.

Tabulated According to Wards and Departments.

Astley Cooper	252
Cornelius	304
Lazarus	332
Job	366
Naaman	411
Luke	376
Patience and Samaritan	300
Evelyn	190
Charity	341
Dorcas	456
Lydia	333
Martha	371
Eye Wards	828
Addison	56
Mary	48
Stephen	59
Esther	49
Queen Victoria	524
Children's Ward	16
Isolation	1
Out-Patients	1510
Front Surgery	864
Back Surgery	41
Nurses' Sick Room	21
	8049

Turning to the General Wards it may be noted that the totals of Operations are as follows:—

Surgeons	820
Assistant Surgeons	1047
Specialists	89
Operators	824
House-Surgeons and Assistant House-Surgeons	604
Dressers	565
	3949

The remaining 77 operations, bringing the total up to 4,026, were performed by other operators.

It should be remembered that no account is taken of operations done either under local anæsthetics or without anæsthetics at all.

Operations in the Obstetric Department (Queen Victoria and Patience Wards) number 535, of which 248 were performed by the Obstetric Surgeons, 113 by the Obstetric Assistant, 100 by the Gynæcological Assistant, 53 by the Obstetric Residents, 6 by Dressers, 9 by Pupil Midwives, while 6 operations were performed by other operators.

The operations upon Ophthalmic cases in the wards number 130, of which 62 were done by the Ophthalmic Surgeons, 48 by the Ophthalmic Assistants, 15 by the Ophthalmic House-Surgeon, 1 by Ophthalmic Dressers, and 4 by other operators.

There were 714 operations for Throat and Ear Diseases in the Wards, 385 by Surgeons, 221 by Clinical Assistants, 77 by the House-Surgeon, 27 by Dressers, and 4 by other operators.

In the Orthopædic Department 123 operations were performed, 50 by the Surgeon of the Department, 15 by the Orthopædic Registrar, 54 by the Clinical Assistant, 1 by the Ophthalmic House-Surgeon, and 3 by other operators.

In the Genito-Urinary Department 91 ward operations were performed, 55 by the Surgeon, 11 by the Clinical Assistant, 16 by the Genito-Urinary House-Surgeon, 8 by Dressers, and 1 by another operator.

In the Venereal Department there were 4 ward operations performed.

11 operations were performed on patients in Skin beds.

In the Front and Back Surgery 905 operations were performed, 3 by Surgeons, 317 by House-Surgeons

and Out-Patient Officers, 572 by Dressers, and 13 by other operators.

In the General Out-Patient Department 581 operations were performed, 536 by Dressers, 14 by Assistant House-Surgeons, 10 by Surgeons, and 21 by other operators.

In the Special Out-Patient Departments 1 operation was performed by a Dresser in the Obstetric Department, and in the Eye Department 1 operation was performed by the Surgeon.

There were 802 operations upon Throat and Ear cases, of which 36 were done by the Surgeon, 75 by Clinical Assistants, 27 by the Ophthalmic House-Surgeon, and 660 by Dressers, while 4 were done by other operators.

In the Genito-Urinary Department 8 operations were performed, 1 by the Surgeon, 2 by the Clinical Assistant, and 5 by Dressers.

In the Orthopædic Department 116 operations were performed, 9 by the Surgeon, 50 by the Orthopædic Registrar, 36 by the Clinical Assistant, 16 by Dressers, and 5 by other operators.

In the Children's Department one operation was performed by Dressers.

Reviews.

"Suggestion" and Common Sense. By R. Allan Bennett, M.D. Lond., M.R.C.P. (Messrs. John Wright and Sons, Ltd., Bristol.) Price 6s. net.

This small book of 105 pages of very clear type is both a protest against the superior attitude of the psychotherapist towards ancient truths that time and experience have already taught most medical men and a statement of the author's conviction of the immense part played by the mind in all disorders of the body. This conviction in varying degrees is shared by most members of the Profession and is largely taught in the medical schools to-day, but in this book we find, for the first time, definite intelligence attributed to the amœba and the peptic cells of the gastric mucosa. On page 15, Dr. Bennett states that the individual cells in the early segmented ovum are enabled by memories to avoid the mistakes of countless generations, that have perished by the way and left no trace and that they possess the power to strike out towards possible improvements on their own account. It is certainly a very high standard of intelligence that will enable a cell to remember and profit by the mistakes of destroyed cells, from which it is not descended.

Except for ideas, such as that quoted above, the book contains little that is not taught in the Hospital wards, although the author attributes a greater power over organic disease to the mental attitude of the patient than is usually done. The book is short and written in a very readable form and is recommended as containing a simple explanation of the methods of "suggestion," and also food for thought on the amœba question.

Practical Physics. By J. A. Crowther, Sc.D. (Messrs. Hodder and Stoughton.) 10s. 6d. net.

This book has been written as a companion volume to the author's "Manual of Physics." It contains the essential practical details of a graduated course of experiments dealing with the various branches of Physics. The text is written in simple language, and the author has ensured accuracy in the performance of experiments both by the use of a number of diagrams of the apparatus for the various experiments, and also by the inclusion of typical calculations. This is a book which can be confidently recommended to the first-year medical student.

The Colloidal State in its Medical and Physiological Aspects. By Sir Wm. Bayliss. (Messrs. Hodder and Stoughton.) 6s. net.

The first part of this book is largely a simple exposition of the physico-chemical principles of the author's "Principles of Physiology." The work merits attention in that its contents, brief yet lucid, are within the range of even the busiest medical man. At the same time certain aspects of medical therapy are put forward which, though of the utmost importance, are generally overlooked. Thus in a consideration of the therapeutic values of drugs in the colloidal state, two points are brought into prominence, firstly that many of these drugs are "protected"—often unnecessarily—so as to prevent mutual precipitation by gels such as peptones, which are in themselves very potent. May it not be, as the author remarks, that the value of many of the colloids lies in the "protective," substances absorbed on to them? Again, it is shown how every colloid is surrounded by a minute amount of the same substance in true solution, and it is only this ionised part of the drug which can act in the body. The value of colloids is that they are very slowly dissociated into simple molecules, and so a drug can be administered in a colloidal form with the knowledge that a minute amount of the drug will act over a very long period. Such principles set forth in this book are of the utmost value, for surely then a tremendous advance would be made if colloidal forms of adrenaline or of insulin were ad-

ministered. Prof. Bayliss has done great service in putting aspects such as these before the medical profession, to whom this section of the book will especially appeal.

Notes on Practical Physics. By A. H. Fison, B.Sc. (Messrs. Arnold & Co.) 5s.

This work furnishes us with yet one more edition of a book well-known at Guy's. In it are set forth in simple yet concise fashion all the experiments which a student requires for his First Professional Examination. The book is written to be used for reference in the laboratory, and in no way encourages superficial methods of performing experiments, but makes each think for himself. Only in this way is a scientific training established. To those who are unacquainted with this useful handbook, we can recommend it with the assurance that it is one of the best obtainable.

Guy's Hospital Reports.

The January number of the "Reports" is now published, and contains twelve articles on divers subjects by members of the Hospital Staff. Pathological studies are contributed by Dr. Nicholson, who continues his fascinating "Studies on Tumour Formation," and by Dr. Passey and Dr. Ryle on "Leptospira ictero-hæmorrhagiæ in Surrey Rats"; Clinical investigations by Dr. Bell, on "Occult Blood in the Fæces," and by two articles on "Colour-Index in Addison's Anæmia"; Medicine is represented by Dr. Barber's "Chronic Urticaria and Angeio-Neurotic Œdema due to Bacterial Sensitation," and Dr. Cameron's "Want of Appetite and Refusal of Food in Childhood"; Surgery by Mr. Thompson's "Clinical Features of Growths of the Kidneys," Mr. Rowlands' "Treatment of Complete Obstruction of the Colon," Mr. Mollison's "Review of Some Cases of Neoplasm of the Accessory Nasal Sinuses," and a reprint from Vol. I. of the "Reports" (1836) on "A Case of a large bong Tumour in the Face, Completely Removed by Spontaneous Separation." A study on "Observations on the Excretion of Urine in a Case of Ectopia Vesicæ" from the Physiological Department, completes the list of articles in the volume.

The "Reports" are of double interest to members, past and present, of the Hospital. First they contain a selection of original monographs on a variety of subjects, which are of general interest, and secondly they keep one in touch with the work which is being done in the various departments of the Hospital. The present number fully maintains the standard of past volumes and is obtainable from Messrs. Henry Froude, and Hodder and Stoughton, 1, Bedford Street, Strand, W.C.2. Price, £2 2s., single volumes 12s. 6d. net. For unqualified students at the Hospital, the price is reduced to 30s.

Green's Manual of Pathology and Morbid Anatomy. By Bosanquet and Wilson. Pp. VIII. +624. (Messrs. Baillière, Tindall & Cox, London.) Price 21s. net.

The fact that there has been a demand for a thirteenth edition of this book, originally published in 1871, is in itself a good recommendation. The new edition is only twenty pages longer than it's predecessor and is still one of the most convenient books of Pathology for the student, both in size and general arrangement. The various chapters are written in an interesting manner and contain in as short a form as is consistent with efficiency a good general description of the modern views of pathology.

The volume is divided into two parts, general pathology, and diseases of special tissues and organs, making references to any particular morbid process very easy. The three chapters on tumours, for example, are written in a much less confusing manner than in some of the other text books in general use, although, to keep them within reasonable limits, the authors have been unable to give much space to the various conflicting theories of tumour ætiology. Nevertheless they have succeeded in giving a clear and very readable summary of them. As an example from Part II., the diseases of bone are discussed at just the right length for those who wish to get a good general idea of the subject, and in six pages the prospective examinee will find all that he will be expected to know.

The volume is printed in a good clear type, is well illustrated, and can be warmly recommended.

Practical Organotherapy. By Henry R. Harrower, M.D. Fourth Edition, 1922. (Endocrines, Ltd., 72, Wigmore Street, W.1.)

This book by Dr. Harrower of California, is the result of twelve years study of the glands of internal secretion and is an explanation of the work of a "laboratory of applied endocrinology," which was established near Los Angeles in 1918. The author frankly admits the dual purpose of his book, which is to serve as a work of reference to the subject of organotherapy, and to draw attention to the pluriglandular extracts, which are prepared at his laboratory. Here he has tested theories on the relation of the internal secretions to disease and the extracts are the results of his experiments.

The book of four hundred pages gives a full account of the various internal secretions and long lists of diseases, in which their exhibition is of assistance. Clinical examples are quoted, both of success and failure, and with modern opinion tending to regard this particular kind of therapy more favourably, the book should be of interest to medi-

cal men apart from its trade aspect. The cases, quoted by Dr. Harrower, open up wide fields for the successful use of endocrine extracts and the perusal of his book will give cause for thought if not for emulation.

Rugby Football.

GUY'S v. ABERAVON.

On Saturday, February 3rd, Aberavon, for the first time, visited Honor Oak Park. It was a little unfortunate for our visitors that during the week previous they should have lost T. Parker, a reserve International threequarter, who joined the Northern Union. Their crack forward, L. Jenkins, was also an absentee, having been chosen to play for Wales against Scotland. Guy's still deplore the absence of E. H. Fouraker, though satisfactory reports of his progress come to hand. Graham-Davies rested a strain and that excellent substitute, J. Finnemore, filled the breach.

Guy's early gained a lead, but not one which gives much satisfaction, though Aberavon richly deserved the penalty, for offside play in their own "25," Neser kicking a goal. After this both sides settled down to some very hard football. Play being chiefly confined to the forwards, who were evenly matched, but our visitors were the stronger. They got the ball from the scrum more often than our fellows and were very sturdy in tackling. When the ball came our side or when Bekker had a chance of spoiling, he was at his best. Of all the good games Bekker has played for the Hospital this one versus Aberavon ranks very highly. Our visitors had learnt the art of scrapping very thoroughly. Rather a pity the whistle was constantly sounding, and half-time approached with no further addition to the score and with little to record, but ding-dong, hard Rugby, excellent tackling, much long touch finding, and free kicks awarded lavishly for offences great and small, both for us and also against us. This is called "keeping a firm hand on the game," and readers will therefore note that this game was almost controlled with an iron one.

In the second half Aberavon had the wind behind them and they gave the home side something to do in the way of defence, but it was pleasant to notice the Hospital defenders were at their very best, although Badenhorst seemed shaky and none too quick. With about 5 minutes to go, Sprong, getting away in his own "25," lost possession to Randall who securing, so unexpectedly and luckily, made the best use of fortune by running round behind the posts. Guy's hard work for victory seemed lost. Jeremy took the kick and a gasp of relief from Guy's, a gasp of disappointment from Aberavon signalled that no conversion had taken place. The game soon ended with the result Guy's 1 penalty goal (3 points), Aberavon 1 try (3 points).

One excellent piece of play I forgot. After 20 minutes play Albertijn got away neatly to the left, drew the opposition and cross-kicked for Taylor to touch down for what looked like a try. Mr. Calver, the referee, ruled "offside" and a scrum took place back at the place of the kick. It was very hard lines, as Albertijn's kick was a model of length and position and the bunch of Guy's men, headed by Taylor, who showed so much intelligent anticipation deserved a better reward.

Guy's Team.—W. Badenhorst, C. L. Steyn, J. G. Van Schalkwijk, P. K. Albertijn, J. Finnemore, F. Bekker, E. L. Sprong, W. D. Doherty, W. H. Taylor, F. B. G. Scholefield, E. E. Neser, F. G. Hutchinson, N. M. Holloway, G. Zondagh, G. G. Cameron.

GUY'S v. OLD BLUES.

As B. G. Scholefield and F. G. Hutchinson were playing for Kent in the County Semi-Final at Taunton, on Saturday, February 17th, and moreover the Old Blues play 8 backs always, it was decided Guy's would play 8 backs, making the attacking quartette into a quintette, and therefore playing 7 forwards. Even now it is difficult to say if the arrangement was a good one; brilliant was the passing of the backs, but often Albertijn, who was the pivot man playing in the centre of the five threequarters, was wasted as there was no room for him. A less clever player would have been in the way. Occasionally he was in the picture and then the extra hand countered the extra man in defence, but as a rule the fifth man was not wanted. Never has Steyn played so well and surely never was such wonderful passing seen, and that with a greasy ball. The accuracy was uncanny, and during the second half, when the forwards heeled constantly, for Bekker to get the ball away with that skill to which we have become used, the threequarters appeared never to miss a pass. The first score came from Steyn, the ball had been handed along the line to Finnemore who burst away in fine style to hand back to Steyn to do the rest. Van Schalkwijk goaled. G. G. Cameron, playing well all through the game, gained the next try. Finnemore the third. The ball had been got up field by Van Schalkwijk. Steyn picked it up going at full speed and sent out to Finnemore, who galloped round, but the kick at goal, taken by Van Schalkwijk, just missed.

Finnemore gained the next try, as soon as ends were changed, going over in the corner, but just before half-time the Old Blues got a try, through

some very feeble tackling on our part. The kick, right in front, missed. Although Finnemore and Steyn had been so active, Mostert and Fellowes-Smith on the left of Albertijn had played well; the former gained a try and nearly got in just previously from a strong dribble. Then came a penalty try against Guy's, an Old Blue had kicked over apparently, and was mistakenly impeded as he dashed for the touch. Several free kicks came our way after this, but none bore fruit and to finish with, some further magnificent work by the back division ended in Steyn going over with a magnificent burst. Neser played a very fine game indeed, and all the forwards, led with the greatest élan by W. D. Doherty, played in tip-top form. S. R. Trick had little to do, he must cultivate a good length kick if possible. Anyhow he shaped well, if his kicking was short, his tackling showed pluck and confidence.

Result:—Guy's 1 goal 5 tries (20 points), Old Blues 2 tries (6 points).

Guy's Team:—S. R. Trick, H. Finnemore, C. L. Steyn, P. K. Albertijn, R. Fellowes-Smith, G. R. Mostert, F. Bekker, J. G. Van Schalkwijk, W. D. Doherty, W. H. Taylor, E. E. Neser, N. M. Holloway, G. Zondagh, H. de Wet Vorster, G. G. Cameron.

GUY'S v. UNIVERSITY COLLEGE HOSPITAL.

(Semi-Final Inter-Hospital Cup Tie.)

Having had a bye in the first round and Charing Cross scratching in the second, we found ourselves in the semi-final without having played a game. The above match therefore took place on Thursday, February 22nd, on the time honoured pitch of the Richmond Athletic ground. P. K. Albertijn and G. Zondagh could not play, examinations demanded their presence or impending ones caused their absence. Yet in a downpour of rain we managed to overcome our lighter opponents by 3 goals and 4 tries or 27 points to nil. Guy's forwards established themselves as masters of the situation in the tight, and as a consequence the backs had many opportunities, quickly the ball was heeled and as quickly did Bekker sling out pass after pass. Sprong got Steyn and Van Schalkwijk away at every conceivable opportunity, and only the sturdiest of tackling kept down the score. Before the time for changing ends we had got a couple of goals. Steyn got the first and Van Schalkwijk the second try. Both were good bits of play and Van Schalkwijk was the successful converter of both the tries.

After the breathing space, passing left the ball with Mostert who managed to gain, with a powerful burst, a try in the corner. Brilliantly did Steyn gain the fourth try, he ran fast and most elusively, cutting in with irresistible dash between the University threes and scoring, also by the corner flag. Again did Mostert plunge over by the same old flag, it looked a perilously near thing for touch in goal, but the try was allowed. Steyn got a couple more, just to show that the rain hadn't damped his energy, and Van Schalkwijk doing the needful, we won as stated. The University men did not attack very much through their back division, but their forwards did their utmost to maintain and secure a good foothold in our territory, but they were driven back with the touchfinding of our backs. The persistence of the Guy's pack with Doherty leading them in great style was kept up to the end. Yet University never gave up and it takes much pluck to tackle and defend throughout a game played under such rotten atmospheric conditions. C. P. Ledward was the University back, he couldn't tackle more than one man at a time, though he often found himself faced by two or more. He stuck to his task with the utmost gameness and so did Elliott-Smith and his fellow centre Whillis. The game was played at a great pace and the display was worthy of a clear sky and a dry ball.

Guy's Team.—S. R. Trick, G. R. Mostert, C. L. Steyn, J. G. Van Schalkwijk, H. Finnemore, F. Bekker, E. L. Sprong, W. D. Doherty, W. H. Taylor, E. E. Neser, B. G. Scholefield, F. G. Hutchinson, N. M. Holloway, G. G. Cameron, N. L. Eckhoff.

GUY'S v. PLYMOUTH ALBION.

To Honor Oak Park on Saturday, February 24th, our visitors came, and saw, and conquered. The margin itself was not great, but on such a day it was bigger than it seems. The ground was thick with mud, the scrums, as always on such days, invariably seemed to be formed in the barest spots, and soon the players became almost indistinguishable. W. H. Taylor, W. D. Doherty, N. M. Holloway, especially the first named were black. It speaks volumes this mud. It showed up who were always in the heaviest work. If it be the last appearance at H.O.P. of the former two, then indeed, if covered with mud, they also covered themselves with glory. So also did F. Bekker and E. L. Sprong. A great scrum-half this Bekker, sometimes one thinks the greatest in England to-day, he has played magnificently for his Hospital and never better that Saturday. Of Sprong, one can speak of nothing but his pluck. Not robust, he turned out twice in the week to play, and though obviously tired, he played most skilfully and well till an injury in the first half, and a second hurt in the last half compelled his retirement.

A good heavy one is not always better than a good light one, but on such a ground the heavy

men, provided they could keep their feet, had a big pull, and those men from Devon could also defend. We had, undoubtedly, most of the game, but could not pierce the rock-like defence. Dyer, the Plymouth full back, was splendid. We have seen many good full backs at Honor Oak Park this season, the Swansea defender, Chantrill of Bristol, Runham of the R.A.F., and now Dyer. The last named must be the best. Nothing was scored till close on half-time when passing by Plymouth left the ball with their right wing man, Wood, and he gained a try. which E. G. Butcher converted with a very fine kick. Splendidly did the Guy's pack stick to their task till close on time, then the Devon men sparkled up wonderfully and a great rush by Sanders almost spelt disaster. A forward pass and Steyn had an excellent chance of getting away. Then came a round of passing which ended in Wood getting in again. The try was not added to. Our tackling was not too thorough and sometimes too high. The backs must go for the man with the ball and put him down, no half measures. Sprong left the field before the end and the ever-ready Neser played at fly half.

Result:—Plymouth Albion 1 goal 1 try (8 points), Guy's nil.

Guy's Team.—S. R. Trick, H. Finnemore, C. L. Steyn, J. G. Van Schalkwijk, G. R. Mostert, F. Bekker, E. L. Sprong, W. D. Doherty, W. H. Taylor, E. E. Neser, B. G. Scholefield, F. G. Hutchinson, N. M. Holloway, G. G. Cameron, N. L. Eckhoff.

Association Football.

The semi-final round of the Inter-Hospital Cup, played on Tuesday, February 27th, at Chiswick, between Guy's and London, resulted in a win for the former by five goals to nothing. The result was a little unexpected, as London are the finalists of the Essex Cup, but on the day's play they were beaten by a side better in every department of the game. Goal-scorers, Williams 2, Pickett 1, Couch 1, Walters 1.

Guy's Team.—T. M. Woolridge, C. A. Wakeford, F. D. Manners, J. Gray, D. J. P. O'Meara, J. C. Hewitson, L. S. Walters, L. Pickett, L. S. Williams, D. H. Couch, P. J. Gonsales.

After a somewhat "relapsing" beginning the Guy's soccer side seem now to have got into their stride. In the last five games they have scored 23 goals against two, and providing they keep up their present form and get fit, the Soccer Cup should be returned to the "Spit" this year, despite the "doughty" opposition of Middlesex Hospital.

Inter-Hospital Hockey Cup (Junior).

GUY'S 2nd XI. v. BART.'S 2nd XI.

(Second Round Inter-Hospital Hockey Cup—Junior.)

The match was played on Wednesday, February 7th, on Bart.'s ground at Winchmore Hill. The ground was very heavy owing to the rain, but the downpour ceased before play started, and a very hard and even game was fought out, which resulted in a win for Guy's by 3 goals to 1.

After a quarter of an hour of play, Wimbush scored a good goal off a centre from the left wing. Curtis scored the second goal shortly before half-time.

After changing ends the play was chiefly in Bart.'s half; Gerrard scored from a corner, but the opponents retaliated and Orchard, their centre half, scored a good goal preceded by a clever dribble from half way.

Ford played a good game at right half, and the two Guy's backs put up a very good defence throughout the game and did well to allow Bart.'s team to score only one goal.

Guy's Team:—D. E. Dunnill, M. F. Awdy, E. T. Coneybeare, J. G. Kingsbury, S. R. Ford, D. W. Lloyd, E. B. Curtis, A. G. Smallbone, H. E. Wimbush, A. Broido, C. Gerrard.

The Fascination of Water-Polo.

It is a strange thing that to the man who has never participated in a game of water polo the pastime seems scarcely to rank among athletics, but to be a mere frolicking in the water. But to the man who has once tried the game it is a very different matter.

Water Polo is fascinating for many reasons. I do not know whether the utility of the game ever strikes those who play it, for probably they are thinking of the fun rather than anything else; but that it is highly useful is indisputable. The water polo player early learns how to free himself from any form of tackle, and, therefore, becomes competent to deal with a panic-stricken person in danger of drowning.

Moreover, his game has given him a freedom in the water which enables him to rescue a person from drowning with an ease which makes the task look simple.

Marriage.

NEWLAND-PARSONS.—On December 30th, 1922, at Christ Church, Naples, Capt. William Douglas Newland, M.C., R.A.M.C., to Janet, youngest daughter of the late Richard Parsons, Ootacamund, South India.

ED.—C. H. C. T.

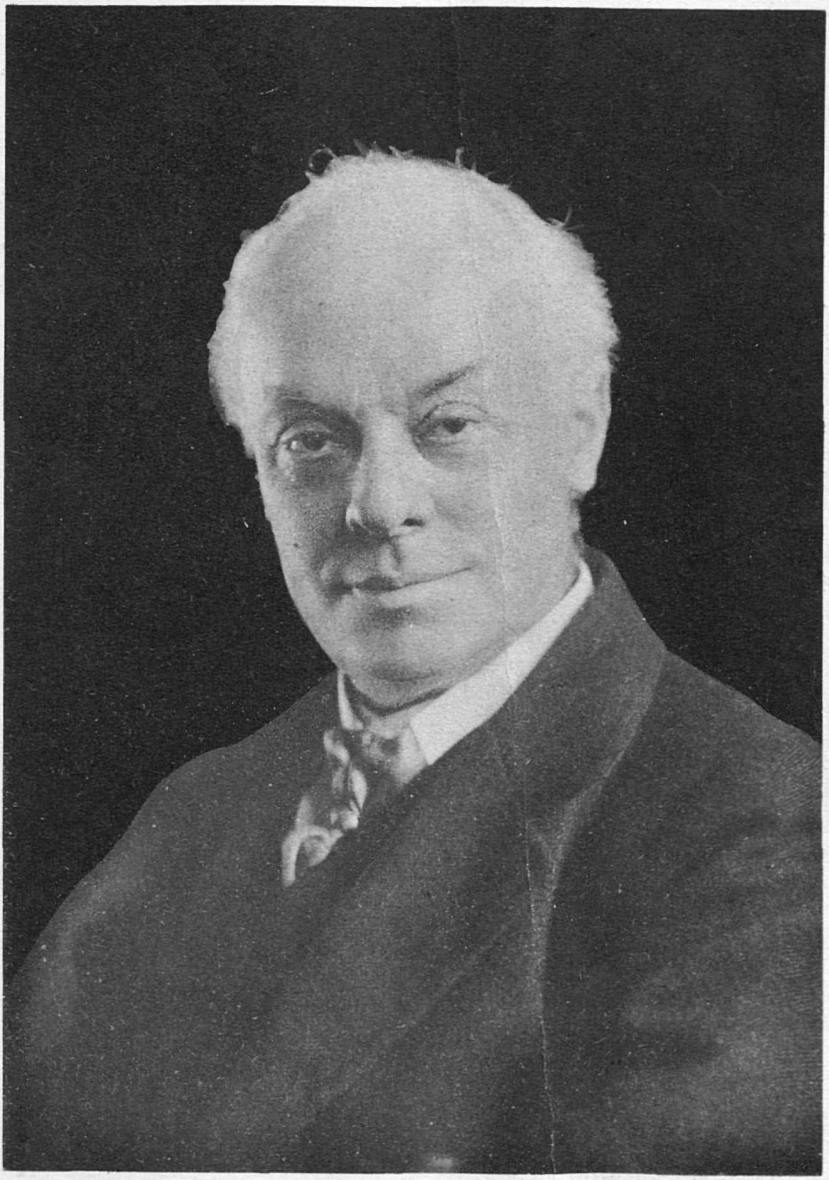


Photo by Elliott & Fry.

ALFRED HENRY FISON, D.Sc.

GUY'S HOSPITAL GAZETTE.

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Alfred Henry Fison, D.Sc.

We are pleased to state that at a recent meeting of the Medical School it was decided to set up a permanent memorial to perpetuate the memory of the late Dr. Fison, and a sub-committee has been appointed to consider the form which this should take. We hope to publish full details as soon as the committee have arrived at a decision.

We are greatly indebted to Dr. M. S. Pembrey, who has kindly collected the following details of Dr. Fison's life, and also the appreciations of his work in spheres outside our Medical School. In our next issue we hope to publish a further appreciation from Mr. Mariott of Oxford.

Alfred Henry Fison was born on November 24th, 1857, at Hendon. He was one of eight children of the Rev. Thomas Fison, B.A., Congregational Minister. His parents were remarkable personalities, greatly beloved by their many friends in and around Hendon. They believed in the old-fashioned Puritan ideals and trained their children in the strict observance of the Lord's Day and resistance to such evils as theatres and dances. These sound views were accompanied by a distrust of scientific teaching and research, as young Fison found at a later stage. At Mr. Munro's School at Elstree he received his early education and showed an almost restless activity in devising and constructing apparatus and making experiments for the interest of himself and others. When he was ten years of age he constructed a panorama out of an old tea-chest, and before an audience, composed of the whole family, including the servants, gave a lecture illustrated by the pictures and diagrams which he made revolve before them. This early inclination was fostered by the master of the village school, for in those days Hendon was a village. Young Fison attended the evening classes in electricity and astronomy, and assisted in the practical demonstrations, and later, as librarian and teacher in the Sunday School, developed his power and influence in the village.

At the age of 17, in 1874, he matriculated at the University of London. At an early date he had decided to work at science, but received little or no encouragement from his father, who, nevertheless, was very proud of his son and was sure that in whatever path in life he might select he would work for the good of his fellow men. Fison went to University College, London, and there studied for three years before he joined the Royal School of Mines, worked at Metallurgy and became an Associate of the School. After taking honours in Chemistry in the Intermediate Sci-

ence Examination he graduated with the degree of B.Sc., in 1881, taught in a school for two or three years, and obtained the degree of D.Sc., in 1884. In the same year he returned to University College as a Demonstrator under Professor Carey Foster, who became one of his greatest friends; here his work was so successful that in 1887 he was appointed Assistant Professor of Physics and held the post until he left the College in 1894.

In 1888, Fison married Alice Maud, the only daughter of A. W. Williamson, F.R.S., Professor of Chemistry at University College. This was a most happy marriage and was blessed by children of whom he was justly proud. Three or four years after his marriage an invitation to become Staff Lecturer in Physics for the Oxford University Extension Delegacy brought Fison into contact with a wider sphere of teaching, for which he was pre-eminently capable. Few men have the gift of imparting scientific knowledge in an interesting manner to a general audience, but Fison possessed this even at an early age, and became during his tenure of the post for twenty years, 1892—1912, one of the most popular and, probably, the most eloquent public lecturer on scientific subjects. Apart from this work, Fison gave many lectures at Toynbee Hall and there formed a firm friendship with Canon Barnett.

He came to Guy's as Lecturer in Physics in 1906, and in 1910 was appointed to a similar part-time lectureship at the London Hospital Medical School. In 1912 he was invited to become the Secretary to the Gilchrist Educational Trust. He had grave doubts about undartaking this work in addition to his other duties, but he accepted the invitation and showed conspicuous ability as an administrator. How greatly his services in these several capacities were valued is shown by the appreciations which, contributed by authorities with special knowledge, are given below.

Fison was a good "all-round" man; at school he was a member of the cricket and football teams, and his interest in the former game lasted throughout his life, and he loved to spend a day at Lord's watching a first-class match. He was a great walker, and competed with success in various walking matches; several times he had walked thirty to forty miles a day; his record apparently was a walk from London to Oxford. In later life he became a keen golfer and was a well-known member of Sandy Lodge Golf Club.

His other recreations were music and photography; he had a fine baritone voice, and played many musical instruments, succeeding particularly with the clarionet. With a camera he would stroll about for hours in the country seeking to obtain a fine landscape with a good cloud effect.

To satisfy his ardent interest in practical astronomy he installed a powerful telescope in his garden at Cricklewood, but the atmospheric conditions were bad and he longed for the time when on retiring to the country, he would be able to work in a purer air.

Fison had a strong constitution and had suffered from no serious ailments, except an attack of diphtheria in 1907, which left him with impaired hearing in one ear.

The various appreciations which have been given in a previous number of the GAZETTE show how greatly Fison was beloved by his pupils and colleagues at Guy's.

It only remains to touch upon another aspect of Fison's character. In his later life he was more and more attracted by philosophy and the relations between science and religion; in serious mood he liked to discuss such questions as whence we came, what we are, and whither we are going. Free-will and predestination were subjects he would debate with those of his colleagues who did not think such discussions useless or a waste of time. His ardent search after truth had set him free from the superstitions of conventional religion. He recognised within himself and in many of his pupils and colleagues a vague longing to know the truth above all things. His lectures on science in relation to philosophy and religion proved this. When Fison gave such a lecture the largest theatre in the Medical School was crowded with his pupils and colleagues, in marked contrast to the meagre audience which on another occasion listened to the more orthodox address of a well-known Bishop. It was known that in his retirement Fison proposed to give more time to lecturing and writing upon these subjects of supreme interest to most men. It may well be that he has left in manuscript some of these lectures; otherwise his chief publications are: "Recent Advances in Astronomy," 1898; "Evolution of Double Stars," in "Lectures on the Methods of Science," 1905, and a "Text-book of Practical Physics," 1911, rewritten 1922.

From Professor WILLIAM WRIGHT, M.B., D.Sc. Professor of Anatomy, in the University of London, and Dean of the London Hospital Medical College.

The death of Dr. A. H. Fison has removed from the company of teachers in the London Medical Schools one of its most attractive personalities. Built on large and generous lines his appearance was such as at once to arrest the attention of even the least observant, while those who knew him were quick to recognise that his physical attributes were not more remarkable than his mental and moral qualities.

He was in every sense a great man, his greatness being particularly apparent, as naturally it should be, in the way in which he disposed of his time. It has been said of Erasmus that he never performed any labour which was uncongenial; whether the same could be said of Fison I cannot say, but this I know that he never did any work which did not give to others the impression of its being congenial. It was his enjoyment of his work that formed the basis of his success as a teacher; this enjoyment was in turn due to his enthusiasm in the study of his subject, to the unwearied care with which he arranged his lectures and prepared his demonstrations, and above all to the great human interest which he took in his audience. Nothing, I imagine, gave him greater pleasure than to watch the effect of his words upon his hearers. Like many other lecturers he was stimulated by the size and earnestness of his audience and probably no one ever saw him as a lecturer at his best who had not heard him lecture to a gathering of working men.

The energy which he threw into his work as a lecturer on Physics and Astronomy left him little time for relaxation, but what time there was he devoted with characteristic enthusiasm to music and photography. One of his chief pleasures in later years was the study of Bergsonian Philosophy, from which I gathered that he had great hopes that at long last the scheme of the Universe was to be laid bare and evident.

From what has been said it will be seen that he was a man of simple tastes and studious habits and had in consequence an ambition freed from all desire for public fame or material advantage and an equaminity which though happily never tried was, we may believe, proof "against all the slings and arrows of outrageous fortune." He was a man of wide human sympathy particularly with the downtrodden; who yet could and did lighten all his work and all his intercourse with a rich and never failing humour. He was a man whom it was a pleasure and privilege to know and whom it will be an inspiration and encouragement to remember.

AVE ATQUE VALE.

Mr. E. L. HORSBURGH, Senior Lecturer on the Oxford University Extension Staff, writes as follows:—

It is unnecessary for me to speak of the brilliancy of my old friend and colleague, A. H. Fison, upon the platform. In his University Extension days he was regarded as by far the finest Science Lecturer upon the Oxford Staff, and, speaking generally, I doubt if, in his own line, he had a superior anywhere, with the single exception possibly of Prof. Vivian Lewis. I would rather speak of him as a man, a colleague and a friend, for I was for many years in close and intimate association with him, and the affection which he generated from the first developed into something more than affection—into an unbounded admiration for his extraordinary gifts. One discovered, almost insensibly and with a sort of shock of surprise, how infinitely superior he was to almost everybody else.

I shall never forget the occasion when the friends and colleagues of Mr. J. A. Marriott combined to give him a testimonial to celebrate his long connection with the Oxford Extension. It fell to my lot to organise the dinner in Wadham Hall, at which the presentation was to be made, and to be generally responsible for the arrangements. It happened that Fison was chairman that year of our Lecturers' Conference, and he was, in my opinion, eminently the man to preside. I had a difficulty in overcoming his modesty, for he always shrank from putting himself forward in any way, but ultimately he yielded to pressure.

The dinner was a brilliant affair. We had with us some of the most distinguished men in Oxford, Heads of Houses, Deans, and Dons. Dr. Michael Sadler, as he then was, hurried from Switzerland in order to attend. There was scarcely a man present who did not rather fancy himself as a speaker, for most of us were seasoned platform men. In due course

Fison rose to make the presentation speech. I may say, without exaggeration, that it was the most wonderful performance that I—I think that any of us—had ever heard. The wit, humour, the sparkle, and yet depth which characterised it was nothing less than astounding. The only objection to it was that every other speaker paled into insignificance. A galaxy of orators was simply eclipsed. I asked Dr. Wicksteed afterwards to transcribe it, for Wicksteed has a memory which is equal to almost any feat. His reply was, "I think I can translate that speech *almost* word for word, but as the alteration of even a word would be a mutilation, I will not attempt it." Nobody, up to that point, had ever doubted Fison's abilities. From that point everybody present recognised that, unawares, we had been entertaining a rare and unique genius.

I remember a debate at the Union. The debating hall was packed. Just as the proceedings were beginning, Fison came in. I have never before, or since, been impressed by a mere entry, but Fison's appearance, as he came in, is vividly with me at this moment. He looked like a sort of beneficent, magnificent and humorous lion, towering above all us minor animals, and yet wholly unconscious of his own commanding personality. He was totally devoid of self-consciousness, side, pretension, or academic superiority. He would be the first to be surprised at the impression he made upon others. It was indeed his simplicity, coupled with his extraordinary personality which made him a king among men.

His interests, outside of his own particular line of study, were wide. I remember meeting him at Crewe, or somewhere in the North, and finding him placidly absorbing Carlyle's "Frederick the Great." Later on he told me he had gone through with it from end to end. It was his custom, on his journeys, to take with him a volume on History, or Literature, or some subject outside his own speciality. It was, he said, a specific against "onesidedness."

In all the years that I knew him, I never heard him say an unkind word of anyone. He was always genial, helpful, and the same. Everybody loved him at first sight, but only those who knew him best could know the range and extent of his capabilities, his genius, and his charm.

From Mr. Albert Mansbridge, M.A., LL.D. Chairman, World Association for Adult Education, The Central Library for Students, and Founder of The Workers' Educational Association.

The first time I met Dr. Fison was at an Oxford University Extension Summer Meeting. He was then well-known as among the happiest and brightest of lecturers on astronomy, electricity and physics. The spirit of enjoyment which possessed him to the full, entered into his treatment of both stars and atoms alike, to the great profit and huge delight of the large audiences he always attracted.

When he became Secretary of the Gilchrist Trust, he knew that I was one of those who were unfortunate in their requests for financial aid, so right at the outset he gave me full oppotunity to state my case, just indeed as he did anyone else. Then his judicial and fair mind could be relied on when it was necessary for him to advise the Trustees.

In all the work of the Gilchrist Trust he revealed a solicitude to understand all that possibly could affect the smallest detail. No man could have gone more thoroughly into the arguments for and against the maintenance of the famous Gilchrist Lectures on the old lines.

He loved to enjoy young men at their work. His smile encouraged them more than ever he knew. Having in him the spirit of youth he understood their enthusiasms and never sought to stand in their way, even if he himself may have thought there was a better.

It is a source of great satisfaction to me that he came to the Central Library for Students in January of this year. He cheered us all by expressing his personal satisfaction at the books we had purchased with a grant given by his Trustees.

In the very midst of his life, seeking to establish new things, he has been called away, but there are not a few of us, who will remember him as a great elder brother, ever ready to rejoice in the successes and to smooth the way for us. He was scientist, lecturer, administrator and teacher. We shall remember him as all four, but his chief gift to us was his own radiant happy spirit.

An appreciation of Dr. Fison's Lectures at Hove :—

In the year 1892 Dr. Fison began work as a University Extension Lecturer. His special subject was astronomy. Speedily there was a great demand for his services; a master-teacher he possessed a marvellous power of elucidating difficulties as well as inspiring the keenest interest. His various courses of lectures given years ago at Hove are still remembered with enthusiasm by those who heard them, but by a still larger number is he remembered as the ideal lecturer who in the autumn of 1921 gave a most deeply interesting course on "Problems of Modern Thought in Science and Philosophy."

Though no longer caring to undertake University Extension work, Dr. Fison was asked whether for the sake of "Auld Lang Syne" he would make an exception and would return to Hove to lecture on astronomy. To this request he replied that he would be willing to return provided he might give in Hove a course that he had lately delivered to his students at Guy's. Whether a Hove audience would be attracted in large numbers was problematical, consequently with characteristic generosity Dr. Fison offered the course without fee. The question of numbers was soon settled; at the first lecture it was difficult to find seats for all who attended, and later the number increased. To make more room the platform was removed, and with his students literally sitting at his feet, Dr. Fison lectured. That course will ever be remembered by those who heard it. The brilliant power of masterly exposition, the kindly humour and the genial personality continued to make the lectures memorable, and as he led his audience to realise that "things are not what they seem," the lecturer seemed to be the leader of a pilgrimage from material facts to spiritual realities. Men and women reverenced his intellectual power and vision and felt that he was a leader in whom they could trust.

For himself, Dr. Fison was happy, he felt that his audience had for him an affectionate regard, whilst the listeners on their part knew that the great teacher took pleasure in giving him of their best.

Yet once more Dr. Fison was heard by a Hove audience, for on January 25th, 1923, a few days before his accident, he delivered to his old students a lecture that he had most kindly offered them, on Giant and Dwarf Stars. With deepest interest the audience listened as he spoke of the birth and death of suns and systems and as he closed, Dr. Fison reminded those who heard him that with our limitations and our ideas of time and space Life must ever remain a mighty mystery.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Guy's Hospital War Memorial Fund.

DEAR SIR,—It is a very great pleasure to inform you that, with the amounts already promised, the necessary sum has now been subscribed and the Executive Committee will be able to proceed with their final commitments.

I should be grateful if you would convey the sincere thanks of the Executive Committee to all the subscribers who have so generously responded to the appeal. It is very fitting that Guy's should be one of the first hospitals to complete their schemes.—Yours sincerely,

M. S. PEMBREY.
Hon. Secretary,
Guy's Hospital War Memorial Fund.

Guy's Hospital War Memorial Fund.

Further Donations.

Amount already acknowledged	5,453	3	10
From a Guy's Man, the son of a Guy's Man	100	0	0
W. Burridge, Esq.	1	1	0
T. Morley, Esq.	0	10	0
	£5,554	14	10

Notices.

Rifle Club.

A General Meeting will be held in Classroom I. at 1 o'clock, Monday, 26th March. All interested in shooting are invited. Business: Election of Officers, Report for Last Season, and any other business for the coming season.

Fencing.

The Hospital Fencing Team meet a team from the Honourable Artillery Company at foil and epée on Monday, 26th inst., in the Gym. at 4 p.m. The Gym. will be open to all who care to attend the match.

Passim.

WE publish to-day a further letter from the Hon. Treasurer of the Guy's Hospital War Memorial Fund, together with the latest list of donations. As will be seen, a Guy's man has subscribed the sum of £100 to the fund. Certain subscribers are extending their donations over a period of five years, and these promised sums, together with that already mentioned, will enable the Committee to complete all the work which they set out to do, and the fund is now closed. A full statement of all the accounts and donations will be issued in due course. It is a matter of great satisfaction that Guy's is the first of the great London Hospitals to complete its War Memorial Fund, and we can not praise too highly the work of all concerned.

THERE were moments during the Cup Final on Wednesday when one's breath almost departed, but the Rugger Cup has returned once more to Guy's and we can safely breathe again! The heartiest congratulations of all are due to the Guy's team, who, in spite of the loss of their captain, pulled off so great a victory. Albertijn's departure from the field was a great blow, and must have had an effect on the rest of the team. The three-quarter line was greatly handicapped, but surely this did not justify their starvation throughout a greater part of the game. We feel that the result might have been somewhat different had all the backs been given a chance to show their worth. A full account of the game appears on page 118.

A FULL contingent of Guy's supporters again travelled down to Richmond, garbed in the dress demanded by such an occasion and accompanied by the Milk Can. The inclusion of the Ku Klux Klan was a novel and outstanding feature of the procession, and the Klansmen are to be complimented for the excellent way in which they had arranged their turn out. We must say that the good reputation of the Borough horses was thoroughly maintained in the presence of these ghostly apparitions, and even an amusing exhibition of how not to ride a horse failed to disclose the thoughts passing through their minds!

A distinguished guest, whose return to the Borough we were pleased to see, also took part in the procession. Phineas, as all know, has recently travelled, and, taking part in an impromptu performance of "As You Were," found himself in the era of Ancient Egypt. This incident gave rise to a query in *Vincula*, the University journal. *What will U.C. do?* The answer was prompt. *Guy's have done it.* But we must confess that we were mystified by the immediate appeal to the police by the owners of Phineas. We wonder whether those who lay claim to Phineas as their mascot approve of such action, and what they would say if ever the Guy's Milk Can were captured and an immediate appeal for help in its return were made to the police. Heaven helps those who help themselves! But perhaps the less said about it the better!

THE First Fifteen are not the only Rugby team to be congratulated. The "A" XV., by beating the Old Dunstonians, 11 points to nil, have won the Kent County Cup, and the Extra A XV. are now in the Final of the Junior Kent County Cup. These victories will better enable us to put forward a plea to all supporters of Hospital Rugby. Owing to the acute shortage of grounds in Kent, and the inability of the numerous junior clubs to purchase the few available ones, the Kent County

Rugby Union Football Club have come forward to help these clubs, and are purchasing a ground at Grove Park. The Guy's ground at Honor Oak Park has but one Rugger pitch, so that the Extra A, the B, and the Nomads teams can never entertain their opponents at home. It has thus been necessary to look elsewhere for a home ground for these junior teams, and during the present season the Kent ground has been used on many occasions for this purpose.

The ground at Grove Park, although rather uneven, is claimed as suitable for friendly games between junior teams. There are three pitches in the field which are hired out to clubs at a charge of one guinea per game, and in this way it is possible to obtain a ground for the junior Hospital teams at a cost of about £25 for the season. The changing accommodation, at present, is in a neighbouring school and is rather uncomfortable.

Funds are urgently needed to pay off the remnant of the £2,000 originally required and not already found or borrowed from the Rugby Union. Also it is desired to improve the changing accommodation by building a pavilion on the ground.

We need not point out that the success of this enterprise will indirectly help to maintain the high standard of Hospital Rugby Football.

It is thus highly desirable that Guy's, as one of the leading clubs in the county, should take first place in supporting the Kent County Club to bring this scheme to a successful conclusion. With this object in view the Hon. Secretary of the Hospital Rugby Football Club. and all the Hon. Team Secretaries, will be glad to accept any subscriptions, however small, from all Guy's men, past or present, who are interested in the Rugby career of the Hospital.

A few more tickets are still available for the Rugger and Soccer Dinner, which will be held on Tuesday next, March 20th, at Oddenino's Restaurant. All who wish to attend are advised to apply at once to the Secretaries of either the Rugby or Association Football Clubs.

The Hospital Association Cup Final, which was to have taken place on Tuesday last, was postponed owing to the recent deluge of rain. The new date will be announced soon, and we hope there will be a large attendance of supporters to help the team in their efforts to regain the Cup. The Hockey Club are also deserving of great praise and support. Both senior and junior teams are now in the respective Cup Finals. The former beat St. Mary's, 13—0, in the semi-final, and now meet King's College Hospital, and the latter, having consecutively beaten London, Bart.'s, and King's, now play St. Thomas's.

We are pleased to state that Mrs. Rowlands will be the hostess at the Annual Hospital Dance. As stated in later numbers of the last issue, the date of the Dance has been changed to April 19th. Further particulars appear on page 117.

Election to Epsom College is again being sought on behalf of Denis Astley Sanford, the son of an old Guy's man, who died at the age of 33, after five years' illness, leaving his widow and son in straightened circumstances. The case is recommended by Mr. H. L. Eason, Dr. John Fawcett, Dr. Herbert French, Mr. R. P. Rowlands, and Sir J. Charters Symonds, in addition to others. This is alone sufficient to show that it is worthy of support, and we hope that all Guy's men who possess either votes or influence will come forward and give their help in this matter.

SUBSCRIBERS to the GAZETTE may obtain copies of the Index to last year's volume on application to the Wills Librarian, who will also receive orders for binding.

THE Inter-Hospital Boxing Competition will be held at the King's Hall (National Sporting Club), Covent Garden, on Friday, March 23.

Tickets may be obtained from G. V. Lloyd-Williams, or N. L. Lloyd, and are 12s. (ringside), 5s. 9d., and 3s. 6d., including tax. Doors open at 7 p.m., and boxing will commence at 7.30 p.m. Guy's have an excellent team for the event and have every prospect of bringing back the Cup once more. It is hoped that as many as possible will come and help to cheer their men to victory. The number of tickets is limited and everyone is advised to secure his as soon as possible.

Papers by Guy's Men.

Sir Charters Symonds, K.B.E., C.B., M.S., F.R.C.S., M.D. The Therapeutic Value of Vomiting in Intestinal Obstruction.—*Practitioner*, cx., 1923, p. 205.

Hector C. Cameron, M.D., F.R.C.P., and A. A. Osman, M.R.C.S., L.R.C.P. The Late Results of Meningeal Hæmorrhage of the Newly Born.—*B.M.J.*, 1923, i., p. 363.

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Dinner of the Dental Society.

The Annual Dinner of the Dental Society was held at The Trocadero on Saturday, 10th inst., about 260 past and present members of the Society attending. The Chairman, Mr. Lewin Payne, received the guests of the Society at 6.30, and at 7 o'clock dinner was announced.

As a dinner it was all that could be desired, as the Society's annual social event, it was an unqualified success, the Committee deserving all commendation for their staff work and their diplomatic choice of a minimum number of speeches. Letters of regret were received from Lord Goschen and Dr. Fawcett, as well as from several members of the Society past and present. After the toast of The King, The Queen and The Members of the Royal Family had been honoured, Professor W. Wright, Dean of The London Hospital, proposed "Guy's Hospital and Schools." Mr. Whitbread, Vice-Chairman of the House Committee, responded for Guy's Hospital with a well-chosen speech reminiscent of the history and expansion of the Hospital and the Schools.

Sir Alfred Fripp replied for the Schools and very popularly laid stress on the extraordinary prowess displayed by the Dental Students in maintaining the Hospital tradition in sports.

Mr. F. N. *Doubleday proposed* "The Visitors," which included among other notables, Mr. J. S. Jameson, President of The British Dental Association, who had journeyed from Newcastle to attend. Surgeon-Com. E. E. Fletcher suitably responded.

Then followed the most popular toasts of the evening which naturally were related to the arrangements of the evening and the work of the Society, and Mr. Lewin Payne, as chairman, who was proposed by Mr. Edney was toasted with the enthusiastic musical honours which his interest and chairmanship merit. Mr. Edney, the hardworking Secretary, proposed by Mr. Bouquet Bull, was also accorded enthusiastic reception, but in spite of these barrages of dischord both gentlemen ably responded.

The Bow Bells Quintette contributed the evening's official entertainment, and a very splendid show they gave. Many a Guy's man ignorant of the existence of the Alouette bird has now a sign-up knowledge of the anatomy of a whole covey of Alouette birds. Altogether the evening was one of the most entertaining and successful ever undertaken by the Society.

Two pertinent comments.—It was interesting to hear the Old School pronounciation of "qualified" with the "i" exalted as in Harley Street, and also the Committee have received a letter of thanks from the South Coast Railways for the very present help of additional candle-power supplied late at London Bridge by a very Latimer of House Surgeons.

Lumbar Puncture and Examination of the Cerebro-Spinal Fluid.

CLINICAL LECTURE BY DR. SYMONDS.

GENTLEMEN,—I am putting the cart before the horse in this lecture and propose talking to you, first, about cerebro-spinal fluid, and afterwards about lumbar puncture.

First of all, as to the formation, circulation and absorption of the cerebro-spinal fluid. Some very interesting experimental work has been done lately, chiefly in America, which has thrown a great deal of light upon these matters. In the first place, Weed, by injecting a suspension of lamp black into the subarachnoid space at the base of the brain, in kittens, has succeeded in producing a mild inflammatory reaction, which gums together the pia and arachnoid, and by closing the foramina of Magendie and Luschka, causes an obstruction between the ventricular system on the one hand, and the rest of the subarachnoid space on the other hand. In these kittens there results an enormous distention of the ventricular system anterior to the block, similar to that which we commonly see in children after basal meningitis. Weed's experiment shows without doubt that the fluid is formed somewhere in the ventricular system above the level at which he established his block.

Dandy, a neurological surgeon, also an American, has gone a step further. By means of the most skilful procedure he succeeded in excising the choroid plexus from one side of a dog's brain, and at the same time obstructed both foramina of Monro, so that, apart from the possibility of direct absorption through the ependymal lining there was no avenue of escape for any fluid that might subsequently be formed in either ventricle. The animal lived for some time and was subsequently killed, when it was found that the ventricle, with the choroid plexus intact, was greatly distended, whereas the other from which the choroid plexus had been removed was collapsed and slit-like. So that Dandy's experiment has shown not only that cerebro-spinal fluid is produced in the ventricles but that it is definitely formed by the choroid plexuses. I have deliberately used the word *formed* rather than *secreted*, because, in spite of all the work that has been done on the subject it is by no means certain that the cubical cells of the choroid plexus possess any secretory activity. The cerebro-spinal fluid is in fact exactly similar to that which can be artificially obtained by simple dialysis of serum through a collodion membrane.

For a long time the question of how the fluid was absorbed has been a matter which has been rather obscure. But Weed appears to have settled the matter by his experimental work. By means of lumbar puncture he introduced into the cerebro-spinal fluid a solution containing potassium ferrocyanide and iron ammonium citrate. The animal was subsequently killed, and immediately after death the brain and meninges were fixed in formalin containing 1 per cent. of hydrochloric acid. By this method the iron was precipitated in *situ* in the form of Prussian blue. Weed found he could trace those granules of Prussian blue through the subarachnoid space into the arachnoid villi and the walls of the great venous sinuses of the brain. I have got the illustrations in his original paper here. I am afraid they will not show on the epidiascope, but I will show them to you afterwards, One can actually see granules of Prussian blue contained in the arachnoid, working their way through the walls of the venous sinuses into the blood stream.

So the cerebro-spinal fluid is chiefly formed in the choroid plexuses, and it is re-absorbed into the blood stream through the walls of the great veins at the base of the brain. From the foramina of Magendie and Luschka it probably passes upwards over the cortex, and downwards into the spinal subarachnoid space. Circulation in this latter is probably very sluggish, the waves sent up by the respiratory movements and the pulsation of the cerebral vessels being sufficient to ensure a thorough mixing of the fluid.

The normal constitution of the cerebro-spinal fluid is as follows:—

	Normal C.S.F.
Colour ...	**Clear and colourless.**
Protein ...	**Average ·02%**
Sugar ...	**Glucose ·05—·07%**
Chlorides ...	**·73%**
Cells ...	**An occasional lymphocyte up to 5 per c.m.**

The methods of examination of cerebro-spinal fluid are these. To estimate the protein you take 2 c.c. of the fluid, to which you add 0·3 c.c. of 30 per cent. trichloracetic acid, boil the mixture and allow it to stand. You compare that tube with a series of standardised tubes known to contain definite percentages of albumen precipitated in the same way. Here (shown) is a tube which I prepared an hour ago. This is fluid from a case of G.P.I. It has been standing long enough to give a test. One shakes it up in order to make it an even suspension, and compares it with the standard tubes. The density of this suspension is about equal to that of the standard tube containing 0·08 per cent.

The estimation of sugar is not a difficult business. If one is not going to do it quantitatively a very simple test suffices. Take 1 c.c. of fluid—because you cannot get very much fluid from lumbar puncture—and ·25 c.c. of ordinary Fehling's solution, and boil. That amount of fluid should just completely reduce the blue solution. If you let the tube stand, the fluid above the red precipitate will be quite clear. If the reduction is incomplete, the fluid above the red precipitate will be violet or a deeper shade of blue. That is an indication of diminished sugar content.

The percentage of chlorides in normal fluid is extraordinarily constant, about ·73. The quantitative estimation of chlorides may be of the greatest value occasionally in helping one to a diagnosis. I am not going to go in detail into the method of estimating chlorides. One does it by the addition of silver nitrate.

The estimation of cells is usually done with a special counting-chamber and is a simple matter, because as a rule there are very few cells to count.

Of all pathological conditions the examination of the fluid is of the greatest value in leptomeningitis. It is convenient to distinguish between two types of fluid in leptomeningitis—the type of fluid that one finds in septic meningitis due to various pyogenic bacteria, the meningococcus, streptococcus, pneumococcus, staphylococcus, typhoid baccilus, influenza baccilus and b.c.c.; and on the other hand the type of fluid found in tubercular meningitis.

The changes found in the cerebro-spinal fluid in cases of septic meningitis are herewith tabulated :—

C.S.F. in Septic Meningitis.

Pressure	...	**Increased.**
Colour	...	**Hazy, turbid, or definitely yellow and purulent. Clot forms on standing,**
Protein	...	**Increased. Variable up to ·3%**
Sugar	...	**Diminished to absent.**
Clorides	...	**Definitely reduced, usually between ·7 and ·6%**
Cells	...	**Greatly increased, usually many hundreds, mainly polymorphs.**
Organisms	...	**The causal organism can as a rule be discovered in dried films and may also be grown on suitable media.**

There is, however, one exception to the facts set forth in this table, and that is, if you get a case in the earliest stages the fluid may be clear, and the cell increase may consist chiefly of lymphocytes. This picture, however, changes rapidly to that which is characteristic of the later stage.

C.S.F. in Tuberculous Meningitis.

Pressure	...	**Increased.**
Colour	...	**Clear at first: fine threadlike coagulum on standing.**
Protein	...	**Increased up to ·3%**
Sugar	...	**Diminished, but not so constantly as in septic meningitis.**
Clorides	...	**Constantly reduced, often below ·6%**
Cells	...	**Increased 10–400. 75% lymphocytes.**
Tb. bacilli in clot,		

In tuberculous meningitis the pressure also is increased, so that often it spurts out of the lumbar puncture needle. In contradistinction to septic meningitis the fluid is always clear, but it contains fibrogen, and if you let it stand you will see a fine, threadlike coagulum formed in the centre of the tube. The protein is increased as in septic meningitis, up to about 0·3

per cent. The chlorides—and this is a very important point—are not only as a rule reduced, but reduced to an extent which is not met with in any other condition so far as I know, being very often below 0·6 per cent. In a recent comparison of figures published by Dr. Perdrau, from his laboratory at Lambeth, there are recorded examinations of the cerebro-spinal fluid in eleven consecutive cases of septic meningitis. In ten of these cases he found that the chlorides lay between ·7 and ·6 per cent. The exception was a case of meningitis due to B. Pfeiffer in which the chlorides were not diminished. He collected seven consecutive cases of tuberculous meningitis during the same period, and in all those seven cases the chloride content lay between ·6 per cent. and ·5 per cent. Therefore this may be a useful point in the differential diagnosis between the two conditions.

The sugar in tuberculous meningitis is nearly always diminished, but not quite so constantly as in the septic type of meningitis.

The cells are increased—there may be ten to four hundred—but not by so many as in septic meningitis. The majority of them, about 80 per cent., are lymphocytes.

The final point is perhaps the most important of all in examining fluid from a case of tubercular meningitis. Having drawn off a test tube full of fluid you should at once pour half of it into another test-tube. Then take the first tube and estimate the cells, proteins, chlorides and sugar. The other tube you must leave standing until a fine threadlike coagulum forms, of which I have told you. When that coagulum is formed, loosen it with a needle from the point at the surface level of the fluid at which it sticks to the tube, and it will settle at the bottom of the tube. Pour off the fluid, and you can take out the clot and spread it on a slide to dry. On staining it by the Ziehl-Neelsen method in nearly every case you will be able to find tubercle bacilli. This is a point that I emphasise, because one sees statements in books that tubercle bacilli are very difficult to find and can seldom be found in tuberculous meningitis. The reason they are not found is that they are not properly looked for.

To recapitulate the difference between fluid in septic and tubercular meningitis. In septic meningitis it is hazy and turbid; in tubercular meningitis it is clear, and a fine coagulum forms later. The amount of sugar and protein is about the same in both. The chlorides are lower in quantity in tuberculous meningitis than in the septic variety. The cells in septic meningitis are mostly polymorphs; in tuberculous meningitis they are mostly lymphocytes. In septic meningitis various organisms can be found; in tuberculous meningitis the tubercle bacillus is to be found in the clot.

Let us pass on to consider the fluid in acute inflammatory diseases of the brain and spinal cord. The commonest of these with which we meet is anterior poliomyelitis, so called because the inflammatory changes are chiefly limited to the grey matter in the anterior horns of the spinal cord. Sometimes acute anterior poliomyelitis may present considerable difficulties in diagnosis. The characteristics of the cerebro-spinal fluid have been very carefully worked out at the Rockfeller Institute, in New York, where they are subject to very severe epidemics of anterior poliomyelitis, which fortunately are rare in this country. Peabody, Draper, and Dochez were the men who conducted these investigations, and the points that they established were three. First, that the earliest change in the fluid in this disease is an increase of cells, and that that increase of cells may occur in the pre-paralytic stage of the illness. (In anterior poliomyelitis there is, first of all, an onset of fever and malaise, and two or three days later paralysis appears.) During this early period the cells are chiefly polymorphs. But during the next twenty-four or forty-eight hours the character of the cells rapidly changes, so that at the moment when paralysis occurs they are chiefly lymphocytes. In number they vary from 10 (which is definitely abnormal), up to 1,000 with an average of somewhere about 50.

The next point is that this increased cell count very rapidly decreases in anterior poliomyelitis, so that by the end of the second week it comes down to normal.

The protein is not increased in the early stages of the illness. It begins to rise in the second week and rapidly reaches its highest level; then begins to fall, and falls very gradually. Peabody, Draper and Dochez found that in the majority of their cases there was still, six weeks after the onset of the disease, an increased amount of protein contained in the fluid. So that you see that point may be valuable in helping one to arrive at a diag-

nosis, if one sees a case in the late stages after the fever and onset of the paralysis is all over.

I have thought it worth reproducing from their paper a figure which illustrates these points, because it is not readily available in the literature.

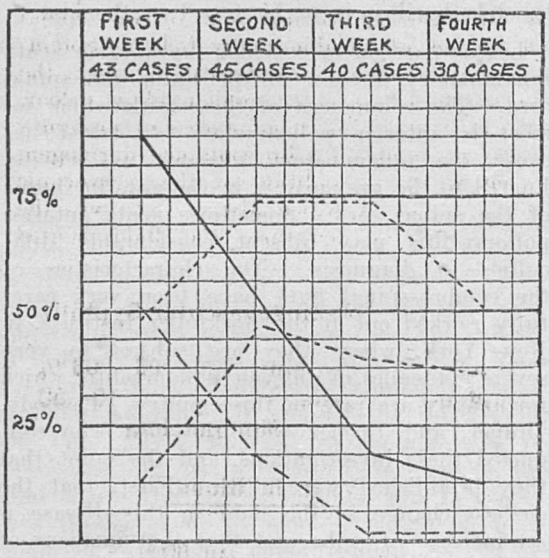

Chart showing variations in cell count and protein content of C.S.F. in anterior poliomyelitis.

——— Percentage of cases with cell count above normal. — — — Percentage of cases with cell count above 50 per c.mm. - - - - - - Percentage of cases with moderate increase of protein. — - — - — - Percentage of cases with great increase of protein.

In anterior poliomyelitis the sugar and chlorides are normal, and this may be a useful point in distinguishing it from a disease with which it may be confused clinically, namely, tuberculous meningitis, for poliomyelitis not infrequently begins with meningeal symptoms. In both cases one gets an excess of lymphocytes in the fluid. But the chlorides remain normal in poliomyelitis, while they are definitely diminished in tubercular meningitis. I want to emphasise the occasional importance of asking for an estimation of the chlorides in the fluid, because I think it is a point that is somewhat neglected and may be of great value.

In the other acute inflammatory disease of the nervous system, of which we have seen a great deal in late years—encephalitis lethargica, the fluid shows very slight changes. That is to say, the colour is clear, there is no clot, the sugar and chlorides are normal. The protein shows a very slight rise, or may be normal. The cell count may be normal, but in the majority of cases shows a slight rise, often between 5 and 10 per c.mm., but occasionally higher, and the cells are all lymphocytes. As in poliomyelitis, so in encephalitis lethargica, the increase of cells diminishes very rapidly to normal.

Another disease of the central nervous system, which is really of an inflammatory nature, is disseminated sclerosis. The cerebro-spinal fluid never shows any changes at all in this, with the exception occasionally of an abnormal colloidal curve.

We come to syphilis of the central nervous system.

Syphilis of the nervous system is classified on a basis of pathological anatomy, under three heads. First, G.P.I., which is a parenchymatous affection of the brain; second, tabes, which is a parenchymatous affection of the spinal cord; third, meningo-vascular syphilis, in which the lesions are not due to direct invasion of the parenchyma, but are secondary to inflammatory changes in the meninges and the vessels.

I have set forth the important changes in the cerebro-spinal fluid in the subjoined table, together with the Wassermann reaction as found in the blood. In all cases the sugar and chlorides in the fluid are normal.

I would draw your attention to the variability of the Wassermann reaction in tabes. The Wassermann reaction in the blood is positive in 70 per cent. of the cases. The Wassermann reaction in the fluid is positive also in 70 per cent. of the cases. There are thus four possible combinations. You may have a positive blood and a positive fluid; you may have a positive blood and a negative fluid; you may have a negative blood and a positive fluid; you may have a negative reaction in both blood and fluid. So, remember, a negative reaction in both blood and fluid does not exclude the possibility of a case being one of tabes. If the clinical evidence is secure, one can confidently make a diagnosis.

The reference to the benzoin curve may require a word or two of explanation. This is the diagrammatic expression of one of the so-called "colloidal reactions" in the cerebro-spinal fluid. It was discovered some time ago that the cerebro-spinal fluid in syphilis of the nervous system contains certain proteins

which have the power of producing flocculation in colloidal suspensions. The substance originally used was gold, but it has been found that a colloidal suspension of benzoin serves the purpose equally well, and is more easily and cheaply prepared.

The performance of the test is quite simple. Six small tubes are placed in a rack, and the same quantity of colloidal benzoin is measured into each. To the first tube is added 1 c.c. of the cerebro-spinal fluid to be tested. After mixing, 1 c.c. of the mixture is taken from tube 1 and put into tube 2, and so on, the 1 c.c. from tube 5 being discarded so as to leave tube 6 as a control. The tubes are then allowed to stand at room temperature for six hours.

this test has been found of considerable value in distinguishing at an early stage between G.P.I. and other forms of neuro-syphilis.

There is one other important condition in which an examination of the fluid is valuable, and that is, in compression of the spinal cord. A Frenchman named Froin was the first person to make the discovery that lumbar puncture, in cases of compression of the spinal cord, yielded a fluid abnormally rich in protein. In the cases which he originally described, the fluid was clear, but of a golden-yellow colour, and contained an enormous excess of protein—up to 4 per cent. It also contained fibrinogen, so that with the addition of the microscopic quantity of blood which always gets into the fluid in lumbar puncture, the fluid clotted

G.P.I.	Tabes.	Meningovascular Syphilis.
Protein ... ·05—·1%	**Protein** ... ·03—·08 %	**Protein** ... ·03—·08 %
Cells ... 20—400	**Cells** ... 10—80 (or higher)	**Cells** ... 10—80
Mononuclear.	**Mononuclear.**	**Mononuclear.**
W.R. in Blood.	**W.R. in Blood.**	**W.R. in Blood.**
In early stages + in 75 %	+ in 70 %	+ in 80 %
In late stages + in 100 %		
W.R. in C.S.F.	**W.R. in C.S.F.**	**W.R. in C.S.F.**
In all stages + in 99 %	+ in 70 %	+ in 50 %
Benzoin Curve.	**Benzoin Curve.**	**Benzoin Curve.**
Paretic.	**Luetic.**	**Luetic.**

At the end of this time with a normal cerebro-spinal fluid there is no flocculation. In the fluid from G.P.I. flocculation is usually complete in tubes 1—5, the control being normal, and this is the "paretic curve." In all other forms of syphilis of the nervous system, flocculation is usually incomplete in tubes 1 and 2, complete in tubes 3 and 4, and incomplete in tube 5, the control being normal, this being the luetic curve. If complete flocculation be indicated by the figure *2*, and incomplete flocculation by *1*, the paretic curve will read *2 2 2 2 2* and the hectic curve *1 1 2 2 1*. In conjunction with the Wassermann reaction spontaneously in the tube. Experience has since taught us that one does not very often meet with the complete picture which Froin described, and that a simple excess of albumen may equally indicate compression of the spinal cord, the excess of albumen being frequently greater than that met with in any other condition, *i.e.*, above 0·3 per cent.

The fact that this increase of protein is due to blockage of the subarachnoid space has been proved in two ways. In the first place, one may compare the cerebro-spinal fluid obtained by lumbar puncture above the level of the block with the fluid obtained below. The

fluid above the level of the block is normal; the fluid below contains an excess of protein, showing that there is no free communication between the two.

The other proof is experimental. An American, named Ayer, has succeeded in producing compression of the spinal cord in animals by artificial obstruction of the subarachnoid space. He produced the obstruction by a circumdural injection of paraffin wax, so as to form a ring round the spinal cord and compress it. Subsequent lumbar puncture revealed an excess of protein in the fluid below the block.

The production of this excess of protein probably depends upon two factors. First, it is probable that protein in small quantities is always being poured out into the spinal subarachnoid space, and this normally passes upwards to be absorbed into the great veins at the base of the brain. In the condition of subarachnoid block this protein accumulates below the block. In the second place, the lesion which compresses the spinal cord also causes compression of the spinal veins which run a longitudinal course from below upwards; and hence ensues dilatation of those veins and transudation of blood plasma into the cerebro-spinal fluid.

The clinical value of this "syndrome of Froin" is considerable in helping us to distinguish between transverse lesions of the spinal cord, which depend upon an intra-medullary affection (inflammatory, degenerative, or tumour) and transverse lesions which depend upon compression of the cord from without.

So much, then, about the characteristics of cerebro-spinal fluid in its various pathological conditions.

Before I describe the main details of lumbar puncture, just a word about indications and contra-indications. One absolute indication for lumbar puncture is meningitis both in diagnosis and in treatment. Relative indications are for diagnostic purposes in syphilis of the nervous system, in poliomyelitis and encephalitis lethargica, and also in all cases of transverse lesions of the spinal cord.

On the other hand, lumbar puncture is an operation that should not be undertaken too lightly. I think that perhaps we are apt to make too little of it. We should not forget that there is a risk, however small, of meningitis, in spite of one's aseptic precautions. I have known one case in which the patient died of septic meningitis following lumbar puncture. I did not perform the lumbar puncture in this case. But I know that the usual aseptic precautions were taken, and yet the patient became infected, no doubt by organisms carried in from the skin. It is a very small risk, but it does exist, and it should be at the back of one's mind and prevent one's undertaking lumbar puncture too lightly.

The other objection is the high proportion of cases in which the operation is followed by severe headaches which may incapacitate the patient for a fortnight. They are particularly liable to occur in elderly people, especially in those suffering from arterio-sclerotic changes. That is a point you will be wise to make known to the patient before you perform lumbar puncture. If he is laid up with splitting headaches for a fortnight he will not be too pleased with you, if you have not warned him of this possibility.

The only absolute indication against lumbar puncture is the presence of increased intracranial pressure from cerebral tumour. It is a simple point. When a tumour arises within the rigid cranial box, room has got to be made for its growth. Room is made by gradual extrusion of part of the cerebellum into the foramen magnum, where it becomes wedged against the medulla. If you perform lumbar puncture you will suddenly withdraw part of the force which is supporting from below that wedge of cerebellum, with the result of a sudden increase of pressure upon the medulla, and possibly sudden death. So it is wise to make sure that you are not dealing with a case of increased intracranial tension before doing lumbar puncture.

As to the performance of the operation, there are two points I am going to mention first, because they are points that one does not learn at hospital. You will probably all of you at some time or another have to perform lumbar puncture in the patient's home. You will find that the conditions are not at all the same as they are in the wards.

First, you must have the patient lying on a rigid bed. In hospital you either have a comparatively rigid bed, or a theatre table. That prevents any lateral curvature of the spine. If you do lumbar puncture with the patient lying on his side on a luxurious soft bed, you may find great difficulty in getting

in. I have struggled with a man in that sort of bed, until I got a spare leaf from the dining-room table, and placed it under the mattress and then I got in easily. There is always a spare leaf.

The second point of no less importance is that you must have the lumbar spines properly curved forwards in order to separate the laminæ as widely as possible. In hospital you have a nurse to hold the patient in the required position. If you are going to do lumbar puncture in a private house, wherever it is possible have a nurse to assist you. It is rather a terrifying spectacle for the average layman to see a needle thrust deeply into the back, especially if the layman be a relative. The nurse also is going to be useful in the after-treatment of the patient, because the after-treatment of lumbar puncture is a very important point. The headaches afterwards are often very severe, but the risk of headache may be eliminated to a great extent by keeping the patient, after the operation, absolutely horizontal for a period of at least twelve hours. It is difficult to manage this without the assistance of a trained nurse.

In performing the operation I prefer having the patient lying on his right side being a right-handed person. Having got him in position, draw a line—having first cleaned the skin—between the two highest points of the iliac crests. This should pass through the 4th lumbar spine. Now draw a line connecting the spines of the vertebræ from below up to the lower dorsal region. These two lines will be your landmarks in your further proceedings.

The next procedure is to identify the 4th and 5th lumbar spines with your finger tips. This is a most important step and none too easy in a fat back. Having achieved it, select as the point of entry for your needle a spot about 1 centimetre to the right of the mid-line, and rather nearer to the 5th than to the 4th lumbar spine. At this point, using a sterile hyperdermic syringe and needle, inject a solution of 4 per cent. sterile novocain, first raising a bleb under the skin, and, when this is insensitive, thrusting the needle deeply in the direction of the centre of the intervertebral space, injecting the novocain as you do so. After a minute or two you should be able to perform your lumbar puncture without any pain to the patient.

If the operation is to be really successful your needle must be sharp. The skin in this region is thick. Once through it, thrust the needle onwards with a firm and steady pressure. If your direction is correct you will sooner or later experience a momentary increase of resistance followed by a distinct sensation as of the point of the needle passing through a tense membrane. Be careful at this stage not to thrust too deeply, or the point of the needle may traverse the thecal compartment between the roots of the cauda equina, and, puncturing one of the veins lying upon the surface, give rise to bleeding which will interfere with the subsequent examination of the cerebro-spinal fluid. If you are not sure whether you have got in or not, it is better to withdraw the stilette to find out than to risk going too far.

Having withdrawn the stilette, if there is no immediate flow of cerebro-spinal fluid, do not be in a hurry to conclude that your needle is not in the right spot. The pressure of the cerebro-spinal fluid is often low, and it may be half a minute before it begins to well out. One of the advantages of entering your needle to the right of the mid-line, as I have described, is that the flow has gravity in its favour. If the fluid comes very slowly it may be momentarily increased by asking the patient to cough, or a little gentle manipulation of the needle may free the point from some obstruction.

If at your first attempt your direction is not correct your needle will strike bone, and the patient will complain of pain. If this occurs you must withdraw your needle until the point is within a few millimetres of the skin, take fresh aim in relation to your landmarks, and try again. A mistake often made by beginners is to suppose that they can alter the direction of the point of the needle without first withdrawing it to the extent I have described. Lumbar puncture needles are made of soft metal, so that they shall not snap, and the para-vertebral muscles are dense. If, while the barrel of the needle is deeply imbedded in these muscles, you attempt to alter its direction by leverage upon the hilt, you will only bend your needle without altering the direction of its point.

Having got in, how much fluid should you withdraw? You have got to be guided by the pressure. Let it run until the flow appears

to be about normal—one drop every other second or so. If there is no increase of pressure, allow it to run, if possible, until you have collected 10 c.c., which is sufficient for diagnostic purposes.

In the after-treatment of lumbar puncture it is most important to keep the patient flat on his back for twelve hours at least, with the foot of the bed tilted if you like. For that reason, unless there is any urgent indication to the contrary, you will find it a good plan to perform lumbar puncture in the evening rather than in the morning. You can follow up the puncture with a dose of chloral and bromide, and have somebody by the bedside to see that the patient does not lift his head. If he wants a drink he is to get it through a tube. At the end of twelve hours you can let him have one pillow, and let him progress by gradual stages to the erect posture, which he should be able to assume at the end of forty-eight hours. If at any point of that erect posture he complains of headache, let him rest a while before you advance him any further.

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Publications Received.

The British Medical Journal, The Isis, The Dental Record, Nursing Times, St. Thomas' Hospital Gazette, London Hospital Gazette, The New Cambridge, Bratislava Medical Journal, Queen's Medical Magazine (Birmingham), Nociones de Higiene, Indian Medical Gazette, Sphinx (Liverpool), The Old Cambridge, The Antiseptic (India), Hospital and Health Review, The Prescriber, Medical Review.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

John Hunter and English Dentistry.

A Paper read before the Dental Society by Mr. C. A. WAKEFORD.

In 1764, in order to devote himself to his anatomical studies, John Hunter, formerly Inspector-General of Hospitals during the Peninsular War, left Golden Square to live at his house at Earl's Court. The garden of this strange house he stocked with innumerable animals, caged and uncaged. Ducks, opossums, hedgehogs, a jackal, a zebra, an ostrich and two leopards were there for his untiring experiments and dissections. After his death it was found that he had made 14,000 preparations of physiological and pathological specimens all of which were recorded and constantly revised. "To the study of anatomy," Ottley tells us, "was devoted every hour that he could spare from his daily avocations, or snatch from the time allotted by others to sleep. . . . In his old age he was often seen standing like a statue for hours over some delicate bit of dissection. To witness an interesting or extraordinary case he would take any trouble or go to almost any distance; but to the daily routine of his practice he always returned unwillingly. . . ."

Ottley also says, "In his youth he was fond of company and mixed much in the society of young men of his own standing, and joined in that sort of dissipation which men at his age are but too apt to indulge in. Nor was he always very nice in the choice of his associates, but sometimes sought entertainment in the coarse broad humour to be found amid the lower ranks of society. He was employed by his brother to cater for the dissecting-room, in the course of which employment he became a great favourite with that certainly not too respectable class of persons, the resurrection men; and one of his amusements in which he took special pleasure, was to mingle with the gods in the shilling gallery, for the purpose of assisting to damn the productions of unhappy authors, an office in which he is said to have displayed peculiar tact and vigour." But the great traits of his character, his monumental patience and his untiring devotion to detail amply obscure this uncouthness which he never entirely lost.

His actual life, however, concerns us little here; and to appreciate his work, surgical, medical, physiological, and dental, we must approach him, not over the fundamentals of modern thought, but over the superstitions and strange remedies of the Middle Ages.

Our earliest knowledge of dentistry takes us back several thousand years before the birth of Christ to the ancient civilisations which arose in the valleys of the Euphrates, the Nile, and the Tigris. We can trace this dental art through the civilisation of the Greeks, Romans and Arabians with but little change. It was not until the Revival of Learning, that remarkable period in the intellectual development of Europe, that medicine and dentistry showed any marked signs of progress; and even then the progress was slow. Indeed, at the time of Hunter, in the Eighteenth Century, dentistry, to all outward appearances, had been stagnant for six hundred years.

Guerini, in his History of Dentistry, writes, "Shortly before Hunter, the recognised treatment of toothache was begun by bleeding on the arm. The following day an aperient was administered. Afterwards, if the pain still persisted, the sufferer was cupped in the region of the scapulæ, or of the spine, and blisters were applied to the nape of the neck, or behind the ears, resinous plasters on the temples; all this without taking into account the remedies which were introduced into the ears." We read that if a lion's canine be suspended from the neck immunity from toothache results; and that touching an aching tooth with the tooth of a dead man and greasing it with horses marrow would cause it to fall out.

The most common prosthetic appliances were extracted human teeth or teeth carved from bone, ligatured to the natural teeth with linen, silk or gold thread. Wax models were sometimes taken of the mouth and ivory or hippotamus tusk laboriously carved to shape.

Uncleanliness was known to be a factor in the production of dental caries, but the eating away of the tooth was universally accepted to be due to worms. Thus Salmuth, by using rancid oil, was said to have extracted a worm, like a cheese maggot, 1½ inches long from a decayed tooth; and Nicholas Pechin reported a similar occurrence by the use of honey and the vapour of henbane seeds. The literature of the time abounds with these experiments.

The action of opium and oil of cloves was known, but concentrated acids were often liberally applied to carious teeth and there are many reports of the consequent necroses. The advantage of plugging in alveolar hæmorrhage was realised; the maxillary sinus had been described by Highmore; and Leuwenhoech had discovered the dentinal tubuli, six or seven hundred of which, he said, would hardly have the consistence of one hair of a beard.

At this period, although some dental specialists existed at home and on the Continent, dentistry separated from medicine, did not exist. The dental operators were rigidly divided into two classes, the general surgeons, who treated toothache as they would any other malady, and the tooth pullers. The latter consisted of the charlatans, who set up their booths at the street corner or the public fair, and the barbers, who, behind their striped poles, were only allowed by law to draw and to scale teeth. Thus, in an old record of the City of London, we find that "a licence was granted to William Thrombyn to drawe teeth and to make clean teeth and no more." Having paid ten shillings it was stated that "the rest other ten shillings he will bring in as soon as he can."

Into this diversity of elements—of proved experiment intermingled with superstitions and traditional remedies—came the personality of John Hunter, greatest surgeon of his age. What Boyle had achieved for chemistry and Newton for physics, Hunter was to achieve for surgery and dentistry.

In 1771, two months before his marriage, Hunter published the first part of his "Treatise of the Natural History and diseases of the Human Teeth," and tradition reports that the proceeds were used to defray the expenses of his wedding. He began with an excellent description of the jaws, their articulation, their movements and musculature, and of the teeth and their pulp cavities. Of the internal pterygoid muscle, he wrote:—

"The internal pterygoid muscle is situated upon the inside of the lower jaw opposite to the masseter. It is a strong short muscle; a little flattened, especially at its insertion. It arises tendinous and fleshy from the whole internal surface of the external ala of the sphenoid bone; from the external surface of the internal ala, near its bottom; from that process of the os palati that makes part of the fossa pterygoidea; likewise from the anterior rounded surface of that process where it is connected to the os maxillare superius. From thence the muscle passes downwards, a little outwards and backwards, and is inserted, tendinous and fleshy, into the inside of the lower jaw from the angle up almost to the groove for the admission of the maxillary nerve, where the surface of the bone is remarkably scabrous."

"The use of this muscle is to raise the lower jaw; and from its direction one would suspect that it would bring the condyle a little forwards, but this motion is contrary to that of the lower jaw, for it is naturally brought back when raised."

This is a remarkable description when we consider the scarcity of dissecting material at the time. Ottley illustrates this scarcity in his story of the Irish giant:—

"Byme or O'Brien the famous Irish giant, died in 1783. He had been in a declining state of health for some time previously, and Hunter, anxious to procure his skeleton, set his man Howison to keep

watch on his movements, that he might be sure of securing his body at his death. Byme learned this and as he had a horror of being dissected, determined to take such precautions as should assure his not falling into the hands of the doctors. He accordingly left strict orders that his body should be watched day and night, until a leaden coffin should be made, in which it was to be enclosed, and carried out to sea and sunk. Byme died soon after, and, in compliance with his directions, the undertaker engaged some men to watch the body alternately. Howison soon learned this, found out the house where these men went to drink when off duty, and gave information to Hunter who forthwith proceeded thither with the view of bribing them to allow the body to be carried off. He had an interview with one of the party at the ale house, and began by offering him fifty pounds if he would allow the body to be kidnapped; the man agreed, provided his companions would consent, and went out to consult them. He returned shortly saying that they must have one hundred pounds. Hunter consented to this and thought the affair settled, but the men finding him so eager, soon came back with an increased demand, which was also agreed to; when further difficulties were found and larger and larger demands made until, it is said, they raised the price to five hundred pounds. The money was borrowed to pay them; and, in the dead of night, the body was removed in a hackney coach, and after having been carried through several streets was transferred to Hunter's own carriage, and conveyed immediately to Earl's Court. Fearing lest a discovery should take place, Hunter did not choose to risk the delay which the ordinary mode of preparing a skeleton would require; accordingly the body was cut to pieces, and the flesh separated by boiling; hence has arisen the brown colour of the bones, which in all other respects form a magnificent skeleton."

Hunter considered a tooth to consist of two substances, enamel and bone, and he described the periosteum of the teeth. Of enamel he wrote, "It is by far the hardest part of our body; . . . when it is broken it appears fibrous or striated and all the fibres or striæ are directed from the circumference to the centre of the tooth. This, in some measure, prevents it from breaking in mastication, as the fibres are disposed in arches, and also keeps the tooth from wearing down as the ends of the fibres are always acting on the food. This substance has no marks of being vascular and of having a circulation of fluids; the most subtile injections we can make never reach it . . . and there appears no gristly or fleshly part with which the earthy part has been incorporated."

Of "The Formation of the Teeth in the Fœtus" he wrote: "The depressions or first rudiments of the alveoli, observable in a fœtus of three or four months, are filled with four or five little pulpy substances which are not very distinct at this age. About the fifth month both the processes themselves and the pulpy substances become more distinct, the anterior of which are the most complete. About this age, too, the ossifications begin on the edge of the first incisores. The cuspidati are not in the same circular line with the rest, but somewhat on the outside, making a projection there at this age, there not being sufficient room for them. About the sixth or seventh month the edges or tips of all these five substances have begun to ossify, and the first of them is a little advanced; and, besides these, the pulp of the sixth tooth has begun to be formed: it is situated in the tubercle of the upper jaw and under and on the inside of the coronoid process in the lower jaw. So that at this age, in both jaws, there are in all twenty teeth, which have begun to ossify, and the stamina of twenty-four. . . . The teeth gradually advance in their ossification and about the seventh, eighth, or ninth month after birth, the incisors begin to cut or pass through the gums, first generally in the lower jaw. Before this time the ossifications in the third grinder, or that which makes the first in the adult have begun."

And of "The Tooth Follicle" he wrote. "When the pulp is very young as in the fœtus of six or seven months, this membrane is pretty thick and gelatinous. We can examine it best in a new born child and we find it made up of two lamellæ, an external and internal: the external is soft and spongy, without any vessels; the other is much firmer and extremely vascular, its vessels coming from those that are going to the pulp of the tooth. While the tooth is within the gum there is always a mucilaginous fluid like the synovia in the joints, between this membrane and the pulp of the tooth."

He considered that the incisors were formed from three centres of ossification, the canines from one, the bicuspids from two, and the molars from three or four.

Of the Formation of the Enamel he wrote: "From its situation, and from the manner in which the teeth grow, one would imagine that the enamel is first formed, but the bony part begins first and, very soon after, the enamel is formed upon it. The enamel appears to be secreted from the pulp above described. (This was the pulpy substance lining the capsule and corresponds to our enamel organ) and perhaps from the capsule which encloses the body of the tooth."

The tooth band was unknown to Hunter and he considered that the "first set of teeth were not pushed out by the second, but were shed by a peculiar process of animal economy." He gave rather an inaccurate description of the growth of the

jaws; described the formation of secondary dentine as the cavity filling up when the teeth wear down; and spoke of supernumary teeth usually being in the incisor or canine region.

Seven years after his marriage Hunter published the second part of his "Treatise on the Natural History and Diseases of the Human Teeth." This deals with pathology and treatment. We must remember that Hunter was a general surgeon and not a dentist. He had no great experience in conservative work.

The only method of pulp devitalisation known to him, was by cauterisation. He used almost the identical method of Abulcasis the great Arabian Surgeon who wrote in the 10th Century, "When toothache depends upon cold or if there exist some worm in the tooth medicaments are of no use, recourse must be made to cauterisation. . . . To perform cauterisation directly with the iron thou must first rest on the tooth a tube of iron or copper designed to preserve the neighbouring parts from the action of the heat. Through such a tube thou shalt apply to the cavity a red hot cautery. This thou shalt do several times. The pain will cease the same day or on the morrow." Hunter added that patients will often not suffer this to be done "until they have endured much pain and several inflammations."

For the decay of teeth arising from rottenness he advised filing the cavity and filling it with lead or gold, or if the patient would allow it, of extracting the tooth, boiling and replacing it.

For pain he recommended laudanum or cotton wool applied to the tooth, blistering, poultices or hot brandy.

Under "Decay of Teeth by Denudation" he gave an excellent description of erosion.

For gumboils or deeply seated abscesses of the jaws he recommended incision from the mouth and the extraction of the offending tooth.

Diseases of the alveolar process he divided into two classes:—The wasting of the alveolar process and the filling up of the socket from the bottom. He treated them by scarification and application of astringents and sea water.

A dental operation of great interest, which Hunter staunchly advocated was transplantation of teeth. He wrote: "It is one of the nicest of all operations and requires more chirurgical and physiological knowledge than any that comes under the care of the dentist." Not only did he advocate replacing a dislocated tooth, or a tooth drawn by mistake, but he advised replantation of dead teeth. "Every dentist," he said, "should have several dead teeth at hand that he may have a chance to fit the socket"; and in the case of transplantation from one person to another says the best remedy was "to have several people whose teeth in appearance are fit; for if the first will not answer, the second may." He described methods of ligaturing these teeth in position with silk, but he frankly admitted that the complete operation was often not attended with success and that gumboils frequently formed.

Hunter also said, "It also happens that transplanted teeth have a very singular operation performed on them while in the socket; the living socket and gum, finding this body kept in by force so that they cannot push it out, set about another mode of getting rid of it, by eating away the fang till the whole is destroyed, exactly similar to the wasting of the fangs of the temporary teeth in the young subject."

He referred generally to regulation work and said teeth may be made to move into position by silver plates or ligatures and, in certain cases, by immediate torsion.

He mentioned no instruments in his paragraph in drawing the teeth and considered the then prevalent practice of separating the gum from the tooth before extraction to be useless. He gave an excellent procedure for the arrest of hæmorrhage. "There follows a bleeding from the vessels of the socket and those passing between it and the teeth; this commonly is but trifling; however, instances have occurred where it has been very considerable and the awkwardness of the situation makes it very difficult to stop it. In general it will be sufficient to stuff the socket with lint or lint dipped in oil of turpentine and to apply a compress of lint or a piece of cork thicker than the bodies of the adjacent teeth so that the teeth in the opposite jaw may keep up a pressure."

This fragmentary sketch gives little conception of the remarkable and lasting character of Hunter's work; and, while some of his dental operations appear strange, we must remember that, looking back over two hundred years of progress, he appears among his contemporaries as a giant among pigmies. With his dictum "Don't think, try, be patient, be accurate," he lifted surgery and dentistry from the rut of tradition and superstition into the free air of investigation and experiment. He stands with us as a living example of fortitude, of patience and of enthusiasm. Above all he was the embodiment of that spirit of enquiry and reform which underlies the progress of all science, and we wonder, as Pater wondered of Leonardo, how so curious a man "went forward into the vague land and experienced the last curiosity."

A Case of Thrombosed Internal Nævus.

D. W. M., aged 18, was admitted on February 10th, 1923, into Dorcas Ward, under Mr. Rowlands. She complained of a swelling between the heads of the first and second metacarpal bones of the right hand and also of tenderness in the swelling if she struck it during her work.

She stated she had always had a swelling in this region, but prior to a blow on it three years ago it had been more on the dorsum of the head of the first metacarpal bone. Since the injury it has gradually moved to its present position and has become progressively larger. Up to the time of the injury it had caused her no pain or discomfort, but since the accident it has been very painful after a blow. At first the pain was slight, but has become more severe of late, in fact she has been obliged to abandon her employment on account of it.

On examination a rather hard round lump about ½ inch in diameter was found between the two heads of the first right dorsal interosseus muscle. It was not attached to skin and a certain amount of movement could be obtained. Edges could be felt on three sides, especially the proximal side; on the distal side the edge was indefinite. It was very tender on pressure. Many suggestions were made as to its nature—the most likely being that it was a fibroma.

Under general anæsthetic a tourniquet was applied to the arm and an incision about 1½ inches long was made on the dorsum of the hand over the lump parallel to the digital vessels and nerves. Its nature was at once seen—the lump consisted of a number of dilated veins containing blood clot. It was lying free between the two heads of the muscle and was held in position only by its connecting veins. It was much larger than at first thought. Only one large feeding vein could be found. This was ligatured and the nævus removed.

The patient was discharged in 4 days.

The condition of internal nævi appears to be rare and so the condition of thrombosed internal nævi would seem to be exceptionally rare. The cases which have come for treatment have had internal nævi in a position where they could be easily injured by slight trauma, e.g., the hands and feet. It appears that trauma leads to thrombosis and further trauma to the thrombosed nævus to pain.

I am indebted to Mr. Rowlands for his kind permission to publish this case.

E. H. J. B.

"Tongues in Trees,"

"There is a man haunts the forest, that abuses our young plants with carving. . . . on their barks; hangs odes upon hawthorns and elegies on brambles; if I could meet that fancy-monger, I would give him some good counsel."—"As you Like It."—*Shakespeare.*

Some eighteen months ago our Editor, greeting novices to our sedate monasterial home with that gift of fanciful expression that alas so few possess, bade them behold and take courage from the benign and welcoming smile on the face of Thomas Guy. Standing before the steps of the Colonnade, he was a permanent promise of the peace and studious good-fellowship that were to be found within the sheltered cloisters of their future sanctuary. Unoppressed by the noisy bickerings of the gabbling world, lost to all the beauties of life in their greed for gold and gaiety, here they would find quietude that their studies might be pursued to the everlasting benefit of their fellow men.

And now what do we find?

Enter those gates with me now, forbearing to glance at his statue, lest you see and are deterred by the awful change on that benevolent face. Gone is the beautiful smile, gone the expression of promised peace and in its place a look so sad, so pained, so long-suffering, that only the hell-conceived bustle that has invaded his precincts has kept it unnoticed. Walk up the Cloister steps. Here is a notice; not such as Rosalind read in the Forest of Arden, but a hideous and hateful thing: "This way to the Box-Office." Wild horses will not drag me to the box-office; rather I will take refuge in our own Forest of Arden. There, neath the stately plane trees, soothed by the avian choir and the chirping crickets, I will forget the mundane poster. But what is this? The trees are no longer plane, they are garish, diseased, bewitched. Posters, pamphlets, my God! even advertisements, flaunt their brazen announcements from every trunk. I reel; I stagger. "Will you let Bart.'s do all the shouting?" is affixed to one. "No, a thousand times no, but leave our Park in peace" I answer. "Have you got your tickets for the super-gala night?" "Come and see Signor Karensky," "Double tickets, 7s. 6d." "Book to Richmond by Lorry." "Come and see the Imitators." Hell has no horrors like these. I am losing my grip on life. My measured gait becomes a jazz. Blast my tarry top-lights, it is too much!!

Reviews.

Diseases of the Gums and Oral Mucous Membranes. By Sir Kenneth Goadby, K.B.E. Oxford Medical Publications. (Messrs. Henry Froude and Hodder and Stoughton, London.) Price £2 2s.

This book is written for the general medical practitioner and the dental student. It is a study of the intrinsic diseases of the gums, the oral symptoms of general diseases, and the multifarious conditions which may arise by absorption from oral disease.

The author has long been recognised as an expert in the bacteriology of the mouth, and in this book he gives of his very considerable experience. In the diseases, comprised under the title, some of which are under the care of the dentist, some under the physician, some under the surgeon, and some under the bacteriologist, it cannot be expected that one man can have an expert experience of all, and as a result there is some inequality in the treatment of the subjects, but when the author is on his own ground, the book is excellent. In the confused subject of oral bacteriology, the author gives a clear account of the normal inhabitants. He indicates the bacteria which are associated with various diseases, and the exultation of virulence which may occur under certain conditions.

The first chapter on the anatomy and physiology of the gums is good, and in it he gives a very careful account of the peridontal membrane, the importance of which is accentuated throughout the book. He points out the importance of the fossa round the neck of each tooth, at the attachment of gum and tooth; here stagnation and inflammation can occur. At this point detachment of gum can occur under various conditions, allowing microorganisms to penetrate, e.g., by the rise and fall of dentures at each masticatory act, and during the treatment in regulation cases.

In the second chapter on various forms of gingivitis, he points out the importance of minor inflammations, which if unheeded may lead on to more serious and wide-spead disease.

He regards generalised chronic hypertrophic gingivitis to be invariably associated with adenoids. This view will not be generally accepted. As he traces the progress of the disease, he finds the marginal edge of the jaw sharing the thickening, until in a severe case gutters of bone may project outwards and inwards from the alveolar process, the gums being stretched tightly over the surface of the thickened mass, which becomes converted into bone. The reviewer understands from this that the gum is no longer hypertrophied. But does the gum hypertrophy actually pass away? Has not the author confused two diseases, one hypertrophic gingivitis and the other hyperostosis of the maxilla, only connected by a common cause?

There is a good account of Vincent's angina, and he points out that the bacillus fusiformis has been found far removed from the mouth, in the cerebrospinal fluid, cerebral and lung abscesses. In children, where the disease is severe, he suggests it may be due to a vitamine deficiency. He has found salvarsan useful.

In the fourth chapter, which is perhaps the best, he points out that "pyorrhœa alveolaris" is a symptom, indicating a flow of pus from the alveolar process holding the teeth. He prefers the more accurate term, periodontitis and points out that there are three stages in the disease, (1) inflammation of the periodontal membrane; (2) suppurative periodontitis; (3) chronic alveolar osteitis. He points out the difficulty in some cases of deciding whether the disease has passed from the first to the second stage, and the microscopic examination for the presence of pus is the only test. The first stage is the curable stage; if the disease has progressed to the second or third stages, then the difficulty of treatment has increased enormously and the chances of cure are doubtful.

He formulates certain general rules which will help in deciding whether teeth may be preserved or must be extracted.

The two chapters, one on disease originating from mouth affections, and the other on the principles and methods of oral disease keep to the same high level of excellent as the one on periodontal disease.

The book is profusely and aptly illustrated.

Annual Dance.

As announced in some of the later issues of the last GAZETTE, the date of the Guy's Hospital Annual Dance at Princes' Restaurant, has been changed from April 6th, to Thursday, April 19th. The Dance Committee hope that this change has not caused much inconvenience. Tickets 17s. 6d. single, 35s. double (including supper and buffet) may be obtained from Messrs. B. L. Laver, L. R. Wells, E. Wornum, H. K. Williams, L. S. Williams, J. C. Rowbotham and D. J. P. O'Meara, Hon. Secretary.

Dancing, 9 p.m.—3 a.m. Vassie's Band.

Pass List.

Society of Apothecaries of London.

FEBRUARY, 1923.

Surgery.—M. Hawke.

Specialities.

THE OMNI VAPORISER.

M. & P. *Enterprises, Ltd., 62, Bryanston Street, Marble Arch, W. 1.*

The Omni Vaporiser consists of a metal cup, to which a cord and plug are attached for connection with any electric light socket, in order to heat the "Omni" Fuid.

A little of this fluid poured into the cup thus heated, begins to vaporise in a few minutes.

Exhaustive tests have been made as to the germicidal valne of this disinfectant, and the results given are in every way most satisfactory.

To places of Public Entertainment, and similarly where people are brought together under indoor conditions, the Omni Vaporiser is well adapted, and is excellently arranged to maintain the atmosphere in a healthy state.

M. & P. Enterprises, Ltd., will be glad to send full particulars to any of our readers on application.

MOTORING ECONOMY.

Most of our readers will have seen the announcement recently made in our advertising columns of a 5 gallon and 20 gallon decorated drum of Sternol Motor Oil. It might be pointed out that these drums are really excellent oil containers and are extremely useful in any garage. Besides, with either the 5 gallon or 20 gallon drum the manufacturers present free, a first rate brass tap. Little need be said about the oil itself. Sternol Oil is widely used and strongly recommended by leading car manufacturers. Its uniformly high standard makes it an ideal lubricant for summer and winter use. The Manufacturers are:—Messrs. Sterns, Ltd., Royal London House, Finsbury Square, E.C.2.

Rugby Football.

GUY'S v. BART.'S.

(United Hospitals Rugby Cup—Final).

At Richmond, on Wednesday, March 14th, the great battle, to decide who should hold the Cup for the next year, was fought and won by Guy's for the fourth time in succession, and won under a handicap so severe that many doubted if Guy's could stand the strain. But not only did they manage to do so, but actually won 5 minutes before the call of time by 1 try to nil. P. K. Albertijn, our Captain and star threequarter, was carried off ten minutes after the start and as we already had had to take the field without E. L. Sprong, injured in the Plymouth match, 14 days ago, our chances did not look rosy.

Bart.'s kicked off and the commencement bore signs of the struggle that was to be—scrum after scrum took place with much kicking for touch, both sides feeling their way and neither being anxious to open up the game or give the ball air. Play was about the 25 yard line of Bart.'s, where a bad pass to Albertijn enabled Bart.'s to clear but Van Schalkwijk, with a fine kick, regained the lost ground. From a scrum the ball came out to Albertijn who kicked for touch and then was heavily tackled with quite unnecessary severity by Thomas. The ball had gone before the tackle and the force with which Albertijn was put down stunned him. After a lapse, he resumed, but it was a shaken man. Next Moody-Jones, when about to field by the touch line, felt his knee give way, he loosed the ball and Albertijn picked up to cross the line, a soft try if it was one, but the linesman ruled that Moody-Jones had rolled into touch, a peculiar decision to most people. Bekker was constantly boring into the mass, Van Schalkwijk kicking for touch. Surely safety was never so overdone, and then again was Albertijn downed, one thinks by the same tackler. This time the injured player was carried off. Cameron went to the threequarter line, Mostert going centre. A lofty kick looked bad for us, till Van Schalkwijk ran back and saved. Trick had also some work to do. Gaisford played well, and he made no mistake in his returns. The seven forwards were splendid, they held the Bart.'s eight well. The game was mostly in Bart.'s half, but no score had been registered at lemon time.

The second portion opened with the Bart.'s men aggressive, Parker, Davies, and Games often noticeable. From strong dribbles Bekker saved and Steyn also ran back and saved brilliantly. Trick was finding touch and not feeding Gaisford. After 20 minutes Bart.'s tried some passing, but on both sides the tackling was tremendous, the defence superb, the

attack of either team cramped and circumspect. How the pack worked; no man spared himself, Neser and Scholefield, in the loose, tackling and spoiling as well, while Davies surely excelled himself for Bart.'s. Bart.'s were pinned to their line, but a couple of bad passes by us threw our chance away. Would a score never come? The everlasting touch finding made one jumpy. At last a round of passing and Steyn dashed to Gaisford, and kicked over; but though his attempt was gallant, a Bart.'s man reached it first. Next came a scrum on the line and Bekker threw himself over to score the winning try amidst tremendous cheers. Neser's kick just missed. Great was the excitement; 4 minutes to go. The game was resumed and a free to Bart.'s on our 25 yard line ably taken by Gaisford just missed the posts. After the drop out our fellows, with Scholefield and Neser in the van, dashed down and were almost in again. Bart.'s drove us back and pressed hard till the final whistle went.

Result.—Guy's 1 try (3 points), Bart.'s 0.

Congratulations, never better earned, were showered on the XV., and the only bitter pill was the injury to our Captain in his last game for the Hospital, which he has served so well and brilliantly. P. K. Albertijn's name will rank high in the Hospital's records as a player and a sportsman.

Guy's Team.—S. R. Trick; G. R. Mostert, C. L. Steyn, P. K. Albertijn, H. Finnemore; F. Bekker, J. G. Van Schalkwijk; W. D. Doherty, W. H. Taylor, E. E. Neser, B. G. Scholefield, N. M. Holloway, E. H. Fouraker, G. Zondagh, G. G. Cameron.

None should be mentioned for distinguished play, the whole XV. deserve the highest praise.

KENT CUP FINAL.

This was played off at Blackheath on Saturday, 24th February, between the Old Dunstonians and Guy's "A". The latter team had had a very hard half of the draw to negotiate before reaching this stage, beating the R.N.C. Greenwich by only 2 points, and Catford Bridge in the semi-final by a try to nil, scored in the last three minutes of the game.

In the final round, however, Meissner, Orsmond and Vorster scored tries, of which the latter was converted by Badenhorst, and Guy's "A" were leading by 11 points to nil at half-time.

The second half was a more desperate affair for the Hospital and the Old Boys were only just prevented from scoring on many occasions, and were pressing hard when the referee called no side and there had been no further scoring in this half.

Mr. Rowland Hill presented the Cup to our Captain, Mr. K. G. Close, and we congratulate him on being the first to bring the Cup to Guy's, since the only other occasion it has appeared in the "Spit" was a joint affair two years ago.

GUY'S v. BIRKENHEAD.

Some people think it humorous to speak disparagingly of our ground at Honor Oak Park. That at Birkenhead was nothing to write home about on Saturday, March 3rd, when the Hospital team, minus Doherty, Sprong, Bekker and Fouraker, journeyed up to the North. The surface of the playing pitch seemed about as firm as Honor Oak Park against Plymouth and no wonder as the rain fall had been prodigious. The home team were without their prominent wing man, Lowry, who once, I believe, had his photograph taken previous to an International match as a member of the side, only to be displaced between the photographing and the start of play. This is almost as hard as being super-international form and never getting chosen. Albertijn and Steyn made a magnificent pair of centres at Birkenhead, but one notes that H. M. Locke, of Birkenhead, is chosen against Scotland. Silly subject to re-open, this Selection business, because one gets no further, but the wretched unfairness of it hurts; hence lets get on with the game. We won, to start at the finish, by 2 goals, 1 penalty goal, and 2 tries to nothing. Neser opened the score by getting a penalty goal after about 15 minutes. But how it rained. Still the game was open and interesting. Excellent passing from Meissner outwards and Steyn got a beautiful try. A little later Steyn got another, a very fine effort indeed. The Park defence looked, and doubtless were, surprised as Steyn got over the line with magnificent dash. Neser converted cleverly.

After half-time Albertijn gained a good try, beneath the cross-bar, and for a time our forwards eased a bit; then Van Schalkwijk kicked across and Steyn, with full steam and a bit over, got possession. That was enough. All we have to say is Steyn scored, and Neser's splendid kick at goal just missed.

Result.—Guy's 19 points, Birkenhead Park, 0.

Guy's Team.—S. R. Trick; J. W. Finnemore, C. L. Steyn, P. K. Albertijn, G. R. Mostert; W. Meissner, J. G. Van Schalkwijk; W. H. Taylor, E. E. Neser, B. G. Scholefield, G. Zondagh, N. M. Holloway, F. G. Hutchinson, G. G. Cameron, F. F. Brayfield.

Hockey.

GUY'S v. ST. MARY'S.

(Senior Inter-Hospital Cup—Semi-Final.)

Guy's met St. Mary's Hospital at Richmond, on Thursday, March 8th. For the first 15 minutes the game was extremely fast and the teams seemed well matched—the defence on each side doing stalwart work. Soon the superiority of the Guy's forwards was manifest and after a bout of long passing Schollum netted the first goal with an excellent shot. Play then settled down to strong attacks by each side. The Guy's backs were in excellent form and cleared well, Awdry being particularly conspicuous. Parkinson, at centre, showed good stick work, but rather starved his left wing during the first half. The score at half-time was 4—0.

During the second half Guy's out-classed their opponents and 9 more goals were registered in rapid succession. The St. Mary's goalkeeper brought off some plucky saves, but could not cope with the continual accurate shooting of our forwards.

Hunt, at outside right was extremely fast and centred well. Schollum and Parkinson both shot well, scoring 6 and 5 goals respectively. Owen and Bonnalie scored the other two goals. Barford at outside left played a good game. The halves did all that was required and fed the forwards well, while the backs were excellent; Dunhill in goal had practically nothing to do.

For St. Mary's, Kingdon, at centre-forward, and McSweeney, the centre-half, were the best.

Final score.—Guy's 13, St. Mary's nil.

Guy's Team.—D. E. Dunhill, M. F. Awdry, F. E. Graham-Bonnalie, A. C. Kempe, K. Hooper, J. G. Kingsbury, W. S. Hunt (Capt.), J. W. Schollum, N. Parkinson, L. E. Owen, and L. J. Barford.

Guy's are now in both the Senior and Junior Inter-Hospital Hockey Cup Finals. The 1st XI. as a result of their victory over St. Mary's (13—0) meet King's College Hospital, while the 2nd XI., after victories over London, Bart.'s, and King's, are opposed to St. Thomas' in the Final.

GUY'S II. v. KING'S COLLEGE II.

(Junior Inter-Hospital Cup—Semi-Final).

This match was played at Richmond on Thursday, March 1st, and ended in a well-deserved victory for Guy's by 3 goals to 2.

The first half was very evenly contested, the King's men showing superior combination. King's scored first and continued to attack, but the Guy's backs, especially Bowen, were in great form and repeatedly repelled the onslaughts of the opposing forwards, Dunhill, in goal, being called on to save on several occasions. Just before the interval the Guy's forwards rallied and began to press. After several shots had gone wide Pidgeon scored a nice goal, placing the ball high into the net.

Upon resuming, Guy's continued to be aggressive and scored twice in quick succession, Broido, who played an excellent game throughout, being responsible for both. King's returned to the attack, but for a time were well held by our backs; however, just before time they succeeded in notching their second point.

For Guy's, Dunhill in goal made several excellent saves. The backs were very sound and cleared in good style. Ford, at centre-half, showed some pretty stick-work; while Lloyd, on the left, was, as usual, untiring in his worrying tactics. Curtis and Broido were the pick of the forwards, the former running strongly and centering well while Boido made many good openings for his inside forwards.

Guy's Team.—Dunhill, Bowen (Capt.), Conybeare, Gathergood, Ford, Lloyd, Curtis, Gerrard, Broido, Pidgeon, Martin.

Births.

LINDSAY.—On March 3rd, 1923, to Dr. and Mrs. Gordon Lindsay, of Purley, Surrey, a son.

ALLPORT.—On February 25th, 1923, at 94, Palace Gardens Terrace, W., to Madeline, wife of Alfred Allport, M.R.C.S., L.R.C.P., a son.

Marriage.

WILDING—ROOTS.—On March 5th, 1923, at Marylebone Parish Church, by the Rev. W. D. Morrisson, D.D., James Armstrong Wilding, M.I.M.E., of 4n, Bickenhall Mansions, W.1., to Evelyn, youngest daughter of the late Mr. and Mrs. J. Roots, The Mill House, Radclive, Buckingham.

Death.

ECCLES.—On March 11th, 1923, at Hove, Herbert Nisbet, late Capt. R.A.M.C., second son of the late Dr. G. H. Eccles, of Plymouth, aged 39, the darling and devoted husband of Lilian (née Weston), through illness contracted during war service.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

IN our last issue we recounted the thrilling struggle which ended by our Rugby team retaining the Hospital Cup, but the events of last week tend, if anything, to eclipse all records, and are justly worthy of pride. On five consecutive days five different cups were brought back to Guy's! On Monday, March 19th the final of the Hospital Association Football Cup, which had been postponed, was played at Chiswick. In a well contested game Guy's proved victorious over the Middlesex by three goals to one, all these being scored by D. H. Couch. On Tuesday the Hockey team beat King's College Hospital, 5 to 1, in the final of the Hockey Cup, and on Wednesday the Kent-Hughes Cross Country Cup was also won. The Guy's runners failed to overtake R. C. Lightwood, of King's College Hospital, but managed to secure the second, third, fourth, fifth, and ninth places, thus winning the Cup. J. G. S. Thomas ran extremely well, and even put the old Guy's veterans, Jago and Housden, in the shade. Jago's performance was also rather wonderful in view of the fact that he had a temperature of 101° at the time!

On Thursday the "A" XV. beat St Thomas's by 15 points to 3 in the final of the Junior Rugby Cup, and on Friday Guy's achieved an overwhelming victory in the Hospital Boxing Competition. As will be seen from the full account, published on another page, the Guy's team won the Cup with 22 points, Bart.'s and London tying for second place with 8 points each.

Great credit is due also to the Junior Hockey team, who put up a great fight in a hotly contested game, but finally went down to St. Thomas's, who beat them by 3 goals to 2.

Such a record of events is a fitting close to the winter season and we can look forward with all hope to the cricket, tennis, athletic and swimming contests in the summer. New members are particularly desired for the Swimming Club. An extremely attractive list of fixtures, in racing and water polo, is being arranged, and all who are interested are asked to communicate with the Hon. Secretary as soon as possible.

THERE was surely a touch of tragic irony in the recent decoration of University College, which was so well effected by East London College. To our mind, even if it necessitated the cleaning, for the first time in history, of the windows of certain professors' rooms it achieved some useful purpose. But from the remarks dropped by certain aggrieved per-

sons it was looked upon as extremely "silly" and even "childish"! However, one can not have things both ways. Once upon a time, in the year 1921, a certain incident happened in St. Thomas's St. ——. But enough said!

Of course the real point at issue is: why are provosts, principals, professors, and superintendents so earnestly opposed to the Brighter London movement?

Our heartiest congratulations to Mr. E. R. Boland, to whom the Physical Society has awarded the Treasurer's Prize for the best essay on "Changes in the Blood in Tuberculosis."

The Physical Society has added two further meetings to its programme. The first, on Thursday, April 12th, is a joint meeting with the Dental Society on "Oral Sepsis," and the second, on Thursday, April 26th, is a special meeting in conjunction with the Anti-Vaccination League to discuss the reasons for vaccination. The latter, which has been advocated in the Gazette, should prove of great interest to all and an extremely keen debate is foreshadowed. We understand that Prof. Adrian Stokes is to be the protagonist of vaccination, but that the name of his opponent is not yet known.

A proposal has once or twice been put forward that the joint meetings, which the Guy's Physical Society holds with other Hospital Medical Societies, should be extended, and we sincerely hope that the Hon. Secretary of the Physical Society will consider this when arranging his programme for next year. At a joint meeting of secretaries of the larger Hospital Medical Societies it would be easy to decide on say three inter-hospital meetings next year, each of which could take the form of debates on medical subjects, or even of a medico-legal mock trial which would be sure to arouse interest.

Recent observations that the Medical Societies of schools such as Manchester and Leeds hold crowded meetings, where famous medical men come up from London to read various papers, have led us to feel that the Medical Societies in London itself do not fully realise the great opportunities which are at their disposal.

Various hints have been dropped, in recent numbers of the Gazette, about things in store for our readers, and we would drop another one here! There will be something novel in the next issue!

We offer our heartiest congratulations to the Hospital Fencing team, who achieved a great victory over the H.A.C. on Monday evening, both in foils and epée. We hope to give an account of this in our next issue.

List of Books added to the Wills Library from April, 1922, to December, 1922.

Purchase—

Beattie and Dickson. General and Special Pathology, 2nd edition, 1921.
Bland-Sutton. Tumours, 7th edition, 1922.
Coleman. Materia Medica for Dentists, 5th edition, 1922.
Cow. Pharmacology, 1920.
Dreyer. Assessment of Physical Fitness.
Handley. Cancer of the Breast, 2nd edition, 1922.
Hewitt. Anæsthetics, 5th edition, 1922.
Hewlett. Pathology, 5th edition, 1922.
Kidd. Common Diseases of the Male Urethra, 1919.
Lewis. Clinical Disorders of the Heart Beat, 5th edition, 1920.
Luke and Ross. Anæsthetics in Dental Surgery, 4th edition, 1919.
Mills and Humphreys. Surgery for Dental Students, 3rd edition, 1922.
Peake. Notes on Dental Anatomy, 4th edition, 1922.
Quervain. Clinical Surgical Diagnosis, 1921.
Ricketts and Byles. Diagnosis of Small Pox, 1918.
Ross. Anæsthetics, 1919.

Savill. Clinical Medicine, 6th edition, 1922.
Schafer. Experimental Physiology, 1918.
Short. Index of Prognosis, 3rd edition, 1922.
Stevens. Diseases of Women, 1921.
Taylor's Medicine. Edited by Dr. Poulton, 12th edition, 1922.
Thomson. Children, 3rd edition, 1921.
Thomson. Diseases of the Nervous System. 3rd edition, 1921.
Vincent. Internal Secretion and the Ductless Glands, 2nd edition, 1922.
Walker. *Dermatology, 7th edition*, 1922.
Wanklyn. How to Diagnose Small Pox, 1913.
Wheeler and Jack. Medicine, 6th edition, 1922.

Presentations—

Messrs. J. B. Lippincott Company—
Davis. Applied Anatomy.
Dwight. Variations of the Bones of the Hand and Foot, 1907.
East and Jones. Inbreeding and Outbreeding, 1919.
Harvey. Scurvy, 1920.
Loeb. Forced Movements, Tropism and Animal Conduct, 1918.
Marshall. Operative Dentistry, 5th edition, 1920.
Morgan. Physical Basis of Heredity.
Parker. Smell, Taste, and Allied Senses in the Vertebrates, 1922.
Parkes. The Elementary Nervous System, 1918.
Piersol. Human Anatomy, 7th edition, 2 vols.
Posey. Hygiene of the Eye, 1918.
Willard. Surgery of Childhood, 1910.
Henry Kimpton (Publisher)—
Barritts. Dental Surgery: Questions and Answers, 1922.
League of Red Cross Societies—
The Etiology and Pathology of Typhus, 1922.

Notices.

Metropolitan Asylums Board.

CHILDREN'S SERVICE.

Appointment of Assistant Medical Officer.

The Metropolitan Asylums Board invite applications for appointment as Assistant Medical Officer at The Downs Hospital for Children, Sutton, Surrey.

Candidates must be unmarried and be qualified by law to practise both medicine and surgery in England. Experience in the administration of anæsthetics, in nose, throat, and ear work, and in the performance of operations for the removal of tonsils and adenoids will be recommendations.

The Hospital contains 360 beds. The cases are received from the Metropolitan Boards of Guardians and the London County Council. Special provision is made for the treatment of cases of ear disease, and a consulting aural surgeon is attached to the institution.

One other Assistant Medical Officer is employed.

The salary is £422 per annum, together with a bonus which, at the present rate, amounts to £93 6s. per annum. The present total salary is thus £515 6s. The candidate appointed will be required to live in the institution and to pay for board, lodging and washing at the rate laid down by the Finance Committee of the Board. (Present rate £130 per annum.)

Preference will be given to candidates under 30 years of age.

Forms of application may be obtained from the Clerk to the Metropolitan Asylums Board, Embankment, London, E.C.4, to whom they must be returned not later than 10 a.m. on the 9th April, 1923.

G. A. POWELL,
Clerk to the Board.

March, 1923.

Guy's Hospital Medical School.

The following Prizes have been awarded :—

Golding-Bird Gold Medal and Scholarship in Bacteriology, 1923—
Mr. R. G. Tame, Medal and Scholarship.
Mr. M. Mitman, Certificate.
Mr. J. J. Lewinstein, Certificate.

Michael Harris Prize for Anatomy—
Mr. D. Ettles, Prize, £10.
Mr. D. G. Bown, Certificate.

Sands-Cox Scholarship in Physiology—
Mr. A. H. Stewart, Scholarship, £15.
Mr. L. R. B. Birt, Certificate.

Junior Prizes for General Proficiency—
Mr. D. G. Bown, 1st Prize, £20.
Mr. L. R. B. Birt, 2nd Prize £15.
Mr. A. H. Stewart, 3rd Prize, £10.

T. B. JOHNSTON,
Dean.

Guy's '89 Club.

The President, C. D. Edwards, M.C., will take the Chair at the Annual Meeting and Dinner which are arranged to take place at the Hotel Cecil, Strand, W.C., on Wednesday, 9th May, at 7.30 p.m. Notices will be posted to members at the end of March, and it is requested that replies be sent to the Hon. Secretary, H. J. Spon, Linton, Littlestone-on-Sea, Kent.

In Memoriam: A. H. Fison.

By J. A. R. MARRIOTT, Honorary Fellow (formerly Fellow) of Worcester College; sometime Secretary to the Oxford University Extension Delegacy; late M.P. for Oxford.

I gladly comply with the kindly expressed desire that I should write a few lines in affectionate appreciation of my dear old friend, A. H. Fison. What a genial companion; what a loyal colleague; what a superb lecturer; what a good friend Fison was is known to all with whom, in any one or all of these capacities, he came in contact. In all of them I have known him for some thirty years or more; and in all of them I rated him very high. But the memory which at this moment comes back to my mind most vividly is of an evening in the hall of Wadham College some few years ago. Some of my colleagues and friends in University Extension had thought it well to mark my fiftieth birthday by the presentation of a charming gift and by entertaining me at a complimentary dinner. Only the other day I was recalling the occasion to my old friend the Warden of Wadham and we agreed that we had neither of us ever attended a dinner where the level of after dinner speaking was so high. Many who read these words will remember the exquisitely touching speech of Philip Wicksteed, the brilliant speeches of Dr. Strong, now Bishop of Ripon, of Sir Michael Sadler, of E. L. S. Horsburgh and several more; but by general consent the speech of the evening was Fison's who presided and made the presentation. He was one of the best chairmen, for an occasion of that sort I ever encountered, and his speech, full of fine feeling and brilliant wit, was one of the best I ever heard. He spoke of me, I remember, "as a man, a friend, and a boss." It is in the latter capacity that I now write of him.

Throughout the whole of my tenure of the Secretaryship of the Oxford Extension Delegacy—from 1895 to 1920—Fison served us faithfully and brilliantly. He was not a son of Oxford, but he came up frequently to Summer Meetings, to lecturer's conferences and so forth, and he was quickly adopted as a son, though he never renounced his allegiance to other Universities. Of his scientific attainments I am not competent to judge; of his capacity as a lecturer I am; and I say without hesitation that he was one of the best I ever heard; popular yet scientific; witty without descent to buffoonery; profound and at the same time exquisitely lucid. His personal appeal to his audience was, moreover, irresistible. Someone said a few days ago that Fison was the only lecturer he ever heard who invariably succeeded in getting *en rapport* with his audience in the first three minutes. I have known others—lecturers, preachers, orators—who had that incomparable gift. But undoubtedly Fison possessed it, in exceptional measure. Nor was his appeal evanescent. It must be, I imagine, fifteen years at least since Fison last lectured for us at Swindon, but the present Secretary to the Delegacy told me that when he was speaking at Swindon some weeks ago, it was Fison's name which evoked the loudest applause. I can well believe it, for he not only filled the lecture halls wherever he lectured, he made friends wherever he went.

Nor did he, as a lecturer and teacher, ever grow stale. The very last time we met he was telling me, with all the zest of a boy, of the delight he had found in the preparation and delivery of a new course of lectures on a subject, somewhat outside his ordinary range, but in which he found himself (and incidentally his audience) immensely interested. This eminent astronomer and physicist was, I discovered, though well advanced in his seventh decade, plunging with the eagerness of an undergraduate into the mysteries of moral philosophy!

I hope that some of those who heard these later lectures will put on record their recollections of them and of him. The impression which Fison left on me, in that last talk, was that his own personal views were—shall I say "*mellowing*," and that the mind of this eager enquirer after truth, was turning more and more in the direction of the phenomena of the immaterial universe. But that is only an impression, and I have hardly the right to record it, yet I confess I do so with satisfaction, for Fison's intellect, like his bodily frame, was great and massive; his emotions were kindly; his wit lambent, and his will firm.

I greatly admired the manner in which (if report may be trusted, for I never saw him at home) he ruled his household. One incident may illustrate his benevolent despotism. The fiscal controversy was at its height; dis-

cussion raged in the domestic circle; Fison, tiring of the argument, announced one day that his mind was not yet made up, but that he proposed to give the matter immediate attention. Until his decision was reached controversy must cease; after judgment was delivered no further discussion could take place. Three days later he called for silence at breakfast and oracularly delivered himself, "Family," he said, "we are free-traders." There was no more to be said.

All his colleagues will miss him sadly, not least the one who for a quarter of a century was proud to be his "boss."

Days that are wrongly called Holy.

Now of all the seasons of the year there are four which are certainly loathsome. (Ah, I thought that would get you; you with the bright eyes and ridiculously small head, who love to sit in the front row and raise a quibble on the least pretext. But if you imagine that there are only four seasons in the year you are very much mistaken. No doubt you learnt it at school out of one of these nasty little red geography books which, like all little books on large subjects, were only written to be a stumbling-block for those who would ascend the tower of knowledge by the lift or the moving-staircase. Hurry up and forget all that rubbish and realise that there is the London Season, the Rainy Season, the Blackberry Season, various Fishing Seasons (both closed and open), innumerable Shooting Seasons, two Firework Seasons—for Thor has sanctioned a second since the Great Armistice, —the Ping-pong and the Caterpillar Seasons, the Mushroom Season which is the most important of all, and one hundred and forty-seven others—easily learnt in the form of a rhyme—that you may find for yourself in any book on the essentials of knowledge).

But before you interrupted I was saying that there were four seasons that were most certainly evil. These are the four Bank Holidays which were invented by Saturn to undermine the greatness of Rome, for Saturn was evil in all that he did even to the extent of gobbling up the children which his wife Rhea bore to him at regular intervals.

On these unholy occasions, which fall (in our time) on the Mondays immediately following Easter, Whitsun and Christmas, and also on a certain day in August, the whole world is let loose. The people in their millions go forth into the country; they go in charabancs and trains, in motor-cars and omnibuses; with a terrible noise they go out to ravage and to sack, to root up and to pull down; and wherever they have been there will be found for many weeks to come glass broken into little pieces and paper torn up and scattered widely.

In the olden time such atrocities were confined to the immediate neighbourhood of railway stations, for the capacity of these people for walking is fortunately very small. You had but to put three miles between yourself and the train and there, safe from all intrusion, you could sit down beneath a tree and pray for the morrow's sunrise. But now in the reign of the charabanc things have changed; there is no place so distant that it may not be reached, so lofty that it may not be scaled, so sacred and closed around that it may not be sought out and desecrated. The slow-running waters of forgetfulness are polluted with tins that once preserved foods, the glades of Pan are trampled underfoot, the mystery of the hillside is buried deep beneath yesterday's news.

Once upon a time there was a man (he was a good man; he thought nobly of the universe, also he believed in the future life and was kind to the people in his village) who, as the time of the August Bank Holiday drew nigh, took a boat and set out at dawn upon a certain river. Now this river was of all rivers in the land the most difficult of navigation, the most inaccessible from roads and trains and beautiful, it was said, beyond all describing. All that day he travelled against the stream and at last towards sunset (after taking off his socks and dragging his boat over half-a-mile of impassable rapids) he came to a great bend where the water was deep and flowing very slowly. Here he landed, and in a wood which grew down to the water's edge he made his tent beneath a tree. For two nights and a day he rested there in peace. But on the second day (which was a Monday), just as he had finished shaving, he heard the tramp of many feet and voices approaching him. He had escaped the pestilence that travels upon the water, but he had been over-

taken by the evil that moves upon the road, even upon that narrow lane which approached within a hundred yards of the river. . . .

Returning late that night his worst fears were realised. Everywhere in the moonlight lay the paper and the glass; flowers also, picked to no purpose had been cast again upon the ground. All that night no sleep came to him; a horrible doubt haunted his brain. What, thought he, would Paradise be like where folk keep holiday not for one day but for ever. That man became an atheist and died a week later from a terrible internal rot.

And so I, fearful of such a fate, go not out upon a Bank Holiday, but instead, closeted within an inner room, seek comfort in the pages of "Paradise Lost," or "The Hunting of the Snark."

R. L. WATERFIELD.

The English Physiclan Enlarged.

Having, for the sum of five guineas, obtained the inestimable privilege of taking my luncheon in the College dining-room, I occasionally resort there, when I am in funds, to discuss the topics of the day and some light recherché dish with my friends. In the past I have found the conversation of my associates as sustaining as the College confections, but recently the flow of table-talk has been curiously disjointed. Greatly daring, I mentioned the fact in an off-hand way, saying, "Where is your old-time light conversation; where is the wit, the repartee, the flow?" to which one replied in words, which made little sense but sounded like "Flow—er—scammony, jalap and ginger—oh!" "Did you say jalap?" I asked. "Yes," he replied, "five to twenty grains." Then I understood; these poor fellows were narcotising their higher centres with weird words and frantic formulæ, against their meeting with the examiners in pharmacology. To such a state of degradation has the noble art of healing been reduced that it's neophytes must now spend sleepless, wild-eyed nights memorising lists of hard, uninteresting figures, which they will instantly forget on leaving the examination room. Heart sore for the sufferings of my friends and full of apprehension as to what would be my own fate when I attempted to follow in their tracks, I turned for solace to my books, by great good fortune taking from my shelves an old volume of pharmacology. Quickly turning over its leaves, I was soon lost in amazement at the depths to which modern advancement has lowered this branch of science. The title page bore the words "The English Physician Enlarged. With Three Hundred and Sixty-Nine Medicines, made of English Herbs, that were not in any impression until this. Being an Astrologo-Physical Discourse of the Vulgar Herbs of this Nation; containing a complete Method of Physick, whereby a Man may preserve his body in health, or cure himself, being sick, for threepence charge, with such things only as grow in England, they being most fit for English Bodies. By Nich. Culpepper, Gent. Student in physick and astrology. Dublin, 1787."

These herbs, being arranged in alphabetical order, I quickly came across "Arrach" and found in this common plant a veritable midwife's panacea. Yet an exhaustive search of the British Pharmacopœia reveals not so much as a word regarding this valuable herb, nor have I ever heard it mentioned by the Hospital Gynæcological Staff. To do what I can to correct this negligence, I quote the "English Physician" in full.

"Arrach, wild and stinking. Called also Vulvaria, from that part of the body, upon which the operation is most; also Dog-Arrach, Goat's-Arrach and Stinking Motherwort.

(Descrip.) This hath small and almost round leaves, yet a little pointed and without dent or cut, of a dusky mealy colour, growing on the slender stalks and branches that spread on the ground, with small flowers in clusters, set with the leaves, and small seeds succeeding like the rest, perishing yearly, and rising again with its own sowing. It smells like rotten fish, or something worse.

(Place.) It grows usually upon dunghills.

(Time.) They flower in June and July and their seed is ripe quickly after.

(Government and Virtues.) Stinking Arrach is used as remedy to help women pained and almost strangled with the mother, by smelling to it; but inwardly taken there is no better remedy under the moon for that disease. I would be large in commendation of this herb, were I but eloquent. It is an herb under the dominion of Venus and under the sign Scorpio; it is common almost upon every dunghill. The works of God are given freely to man, his medicines are common and cheap, and easy to be found: ('Tis the medicines of the College of Physicians, that are so dear and scarce to find.) I commend it for an universal medicine for the womb, and such a medicine as will easily, safely and speedily cure any disease thereof, as the fits of the mother, dislocation, or falling out thereof; it cools the womb being over-heated. And let me tell you this, and I will tell you the truth, heat of the

womb is one of the greatest causes of hard labour in child birth. It makes barren women fruitful. It cleanseth the womb, if it be foul and strengthens it exceedingly; it provokes the terms if they be stopped, and stops them if they flow immoderately; you can desire no good to your womb but this herb will effect it; therefore if you love children, if you love health, if you love ease, keep a syrup always by you, made of the juice of this herb, and sugar (or honey if it be to cleanse the womb), and let such as be rich keep it for their poor neighbours, and bestow it as freely as I bestow my studies on them or else let them look to answer it another day, when the Lord shall come to make inquisition of blood."

Where, in modern pharmacological works, can we find such a wonderful combination of picturesque description, counsel and philantrophy? And what student, after reading this short account, will not remember to his dying day the virtues and uses of Stinking Arrach? Would that I could give as fully the virtues of the remaining three hundred and sixty eight herbs. Nor would I have you think that the clinical knowledge of Nich. Culpepper was one whit inferior to the most modern distinguished physician. The following might have been penned by Dr. French himself: "The truth is, I fancy purging and vomiting medicines as little as any man breathing doth, for they weaken nature, nor shall ever advise them to be used unless upon urgent necessity. If a physician be nature's servant, it is his duty to strengthen his mistress as much as he can, and weaken her as little as may be."

Until I had read this fascinating text-book, it was a source of great wonder to me that the inhabitants of such a crowded district as that of Soho should have so many appearances of complete health, such soft complexions, such bright, sparkling eyes. Yet see what Mr. Culpepper says of Garlick—and note the absence of tedious description when none is needed.

"The offensiveness of the breath of him that hath eaten Garlick, will lead you by the nose to the knowledge hereof, and (instead of a description) direct you to the place, where it groweth in gardens, which kinds are the best, and most physical.

(Government and Virtues.) Mars owns this herb. This was anciently accounted the poor man's treacle, it being a remedy for all diseases and hurts (except those which itself bred). It provoketh urine and women's courses, helpeth the biting of mad dogs, and other venemous creatures, killeth worms in children, cutteth and avoideth tough phlegm, purgeth the head, helpeth the lethargy, is a good preservative against and a remedy for any plague, sore, or foul ulcer; taketh away spots and blemishes in the skin, easeth pains in the ears, ripeneth and breaketh imposthumes, or other swellings. And for all these diseases, the onions are as effectual. But the Garlick hath some more peculiar virtues besides the former, viz., it hath a special quality to discuss inconveniences coming by corrupt agues or mineral vapours, or by drinking corrupt and stinking waters, as also by taking of Wolf-bane, Hen-bane, Hemlock, or other poisonous and dangerous herbs. It is also held good in hydropick diseases, the jaundice, falling sickness, cramps, convulsions, the piles, or Hæmorrhoids, or other cold diseases."

Yet who ever heard a West-End practitioner ordering his patient "the onions, t.d.s."

When I open my "Cow" or "Hale-White," which having no immediate examination to face, is very rarely, I expect to find nothing but matter of fact pharmacology and am not agreeably surprised. But Mr. Culpepper has sentiments to express on a variety of subjects. In discussing the three kinds of Wormwood, he writes briefly of the third variety:

"Roman Wormwood; and why Roman, seeing it grows familiarly in England? It may be so called, because it is good for a stinking breath, which the Romans cannot be very free from, maintaining so many bawdy-houses by authority of his Holiness."

Of the herb Arssmart there are two kinds, each with its own peculiar virtues. Yet see how grave a scandal is revealed by the Author, in connection with this humble herb.

"All authors chop the virtues of both sorts of Arssmart together, as men chop herbs to the pot, when both of them are of clear contrary qualities. The hot Arssmart groweth not so high or tall as the mild doth, and hath many leaves of the colour of peach leaves, very seldom or never spotted; in other particulars it is like the former, but may easily be known from it if you will but be pleased to break a leaf of it across your tongue, for the hot will make your tongue to smart, so will not the cold. If you see them both together, you may easily distinguish them, because the mild hath far broader leaves: and our College of Physicians, out of the learned care of the public good, Anglice, their own gain, mistake the one for the other in their new master-piece, whereby they discover (i) Their ignorance, (ii) Their carelessness; and he that hath but half an eye may see their pride without a pair of spectacles."

I will quote one more herb, showing the logic of a Student of Physick and Astrology. It is the Woodbine or Honey-suckle, of which the author truly says, "*It is a plant so common, that every* one that hath eyes knows it and he that hath none, cannot read a description, if I should write it." Listen to its Government and Virtues.

"Doctor Tradition, that grand introducer of errors, that hater of truth, that lover of folly, and that

mortal foe of Doctor Reason, hath taught the common people to use the leaves or flowers of this plant in mouth-water, and by long continuance of time, hath so grounded it in the brains of the vulgar that you cannot beat it out with a beetle: All mouth-waters ought to be cooling and drying, but Honey-Suckles are cleansing, consuming and digesting, and therefore no way fit for inflammations; thus Doctor Reason. Again, if you please, we will leave Doctor Reason a while, and come to Doctor Experience, a learned gentleman, and his brother: Take a leaf and chew it in your mouth, and you will quickly find it likelier to cause a sore mouth and throat than to cure it. Well then, if it be not good for this, what is it good for? It is good for something, for God and Nature made nothing in vain. It is an herb of Mercury, and appropriated to the lungs; the celestial Crab claims dominion over it; neither is it a foe to the Lion; if the lungs be afflicted by Jupiter, this is your cure: It is fitting a conserve made of the flowers of it were kept in every gentlewoman's house; I know no better cure for asthma than this; besides it takes away the evil of spleen, provokes urine, procures speedy delivery of women in travail, helps cramps, convulsions and palsies, and whatsoever griefs come of cold or stopping; if you please to make use of it as an ointment, it will clear your skin of morphew, freckles, and sunburnings, or whatever else discolours it, and then the maids will love it. I have done when I have told you what authors say, and cavilled a little with them; they say, the flowers are of more effect than the leaves, and that's true; but they say the seeds are least effectual of all. But Doctor Reason told me, that there was a vital spirit in every seed to beget its like, and Doctor Experience told me, that there was a greater heat in the seed than there was in any other part of the plant: and withal, that heat was the mother of action, and then judge if old Doctor Tradition (who may well be honoured for his age, but not for his goodness) hath not so poisoned the world with errors before I was born, that it was never well in its wits since, and there is great fear it will die mad."

Here, with the greatest regret, I must leave this fine, old book, praying that Heaven will defend me from its usurper, the British Pharmacopœia.

Publications Received.

British Medical Journal, Vincula, Isis, Indian Medical Record, The Hospital Gazette, The Nursing Times, The Serpent (Manchester), University of Durham College of Medicine Gazette, University College Magazine, The Stethoscope (Bristol), Architectural Association Journal, The Gong (Nottingham), Medical Journal of South Africa, Bedford College Union Magazine, Middlesex Hospital Journal.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—In the extremely clear account of the pathological findings in the cerebro-spinal fluid that Dr. Symonds gives in the clinical lecture published in the GAZETTE of March 17th there is one statement that will not meet with general acceptance. Dr. Symonds describes the technique to be adopted in looking for tubercle bacilli in cases of tubercular meningitis, and emphasises the fact that they are to be found in almost every case; he meets the "statement in books" that the bacilli are difficult to find by saying that they are not found because they are not properly looked for. The only possible inference from this is that if the technique described by him is adopted there is no difficulty. The truth of this view I dispute with an emphasis as great as that with which Dr. Symonds puts it forward. There is unfortunately no magic in the technique he describes; it is the time-honoured method, described in the text-books; I learnt it twelve years ago in Dr. Eyre's laboratory, and I have every reason to believe that it is almost universally used, although Calmette, who must be allowed to be no insignificant authority, definitely advises centrifugalisation before a clot has been allowed to form. Although during recent years I have made frequent enquiry I have never met in the flesh anyone who claimed anything approaching even 90 per cent. of positive findings in any extended experience of routine laboratory work. Dr. Symonds probably has in mind statements in books on clinical medicine, but, as a matter of fact, in those dealing with laboratory methods (*e.g.*, Emerson, Simon, etc.) there are usually given the figures of Fürbringer, Schwarz, and Koplik which do support Dr. Symonds' view; these, however, all deal with comparatively small numbers of cases. Wood, I think, puts the case more accurately when he says that 50 per cent. of positive findings may be generally expected and that great care and prolonged search will raise the figures to 75 or 80 per cent. This is, I expect, the crux of the matter, but Dr. Symonds stops just short of it; will he tell us how long he continues his search before admitting failure, and on how many cases is he basing his conclusions? My own practice is to search for at least half an hour, but that certainly does not bring my positive findings to more than 50 per cent., and I doubt if they reach that.

Even this does not dispose of all difficulty; although it is characteristic of cases of tubercular meningitis to yield a fluid that gives a fine coagulum on standing, this is by no means always the case; to favour its formation some workers advise putting the

fluid in the ice-chest, others in the incubator, but personally I have not obtained any definite advantage from either method. I am, however, quite clear in my own mind that the bacilli are not necessarily always more abundant in the clot than in the deposit after centrifugalisation. My own practice is to remove the clot when it forms and then centrifugalise, and to examine both clot and deposit. I have on several occasions found the bacilli in the deposit after failing to find it in the clot, whilst on one occasion after finding the bacilli in the deposit I inoculated a guinea-pig with the clot without any signs of infection resulting.

Dr. Symonds mentions the fact that in anterior poliomyelitis the lymphocytic increase in the cerebro-spinal fluid is preceded in the very early stage by an increase in the polymorphonuclear cells. The same thing is seen sometimes in tubercular meningitis; Calmette quotes Lutier to the effect that polymorphonuclears predominate in 14 per cent. of cases; Buzzard and Greenfield are unable to correlate the increase of polymorphonuclears with any definite stage of the disease, but Wood says it occurs in the early stages. In two cases which I have seen the polymorphonuclear increase occurred very early and rapidly passed, leaving the typical lymphocytic predominance in the later stages. As the same sequence may be observed fairly frequently in tubercular pleural effusions, I am inclined to think that it is possibly the normal occurrence which we rarely get the chance to detect.—I am, Yours faithfully,

GORDON W. GOODHART.

University College Hospital,
March 24th, 1923.

SIR,—I wonder if any of your readers can supply the blanks in the following mutilated rendering of a little anecdote related by the late Dr. Pye-Smith. It ran thus: "While studying under Trousseau, then Professor of Clinical Medicine at the Sorbonne, conversation at a dinner party one evening ran on the question of correct French pronunciation. One of the French guests said, 'If you want to hear the purest French spoken there are now in Paris two men that you should go and listen to. One is . . . (mentioning a famous actor at the . . . . Theatre) and there is a little physician named Trousseau at the Hotel Dieu. These two men speak the purest French at present spoken in Paris.'"

Perhaps this little scrap is worth recording and, if possible, completing.—I am, Sir, etc.

CHARLES SPURRELL.

London, E.3.
24th March, 1923.

Dental School Prizes.

By the Dental Correspondent.

The entry lists for the Prizes to Dental Students are now closed, and it is hoped that a comment on the conditions printed as opposed to those actually controlling may not be regarded as indelicate by the Dental Council.

For the Senior Prize in Dental Subjects the printed conditions state that the examination is open to students who have studied in the Dental School of Guy's Hospital for not more than, with regard to Anatomy and Physiology, 3 years, and with regard to Surgery 4 years (including in each case a 2 years' course in Dental Prosthetics).

The Council, however, hold that students who have attended lectures in Anatomy and Physiology for more than one year may not enter although this is not a stated condition and in spite of the fact that their total study at the Hospital may be under three years.

This most effectually debars all students who commence their study of Anatomy and Physiology in the Spring Term.

In the case of the third year prize for Dental Subjects, the conditions are that the examination is open to students who have studied in the Dental School of Guy's Hospital for not more than 3 years (including a 2 years' course of Prosthetic Dentistry).

A student who has done more than a year's clinical study is not able to enter however, although in the general condition applying to the three years' study he may be quite in order. The matter of clinical study is entirely avoided in the notice.

Regarding the Prize for Operative Dental Surgery, this, again, is controlled by a period of clinical study and not by the maximum of four years general study, or rather it is controlled by both and not by the four years' general study only.

The Council are right in imposing any condition they choose, but what is a Dental Student, that he should know even the working of his own mind apart from that of the Council!

Finally, let the attention of all Dental Students, who qualify for entry under such conditions as do exist, be called to the meagre entry list this year. The Prizes are the honours of a student's hospital career, and it is better to be known as a man who went "full out" for a prize and lost than as a man who did not trouble about them at all.

Cleanliness and Rest.

It may interest your readers if I, an old man approaching 80, keep you a few minutes whilst I look back on the fifty years which have passed since I, as a Guy's man, heard from the lips of the President of the College of Surgeons all the privileges which the Membership of the Royal College of Surgeons conferred on me as a Member of that august College. It was just the time when the body of the profession generally was beginning to acknowledge the untold advantages which the patient work of Joseph Lister had put into the hands of the surgeons of the Present and Future.

It seems strange to us to-day that some of what we then considered, our best men looked on his precautions as mere fads, feminine foibles and potterings which were unworthy of the members of a noble profession.

Much difficulty was created at first by the imperfection of the methods employed. It was quite clear to the faithful that truth lay hidden in the complicated process, but it was years before it was clear that the entire secret lay in perfect cleanliness alone. But some of the earliest votaries and devotees were so saturated with the sanctity of Lister's first formulas, that they clung to the spray and carbolic acid to the end of their days. fearful, if they once let go of this in favour of other suggestions, lest they might be trusting to things whose worth had not been so fully proved. The sting and aroma of carbolic acid were evidences which were lacking in the colourless and odourless mercuric solutions.

It was in the early days that the following case came under my care and it stands out, even to-day, in my memory as one of my best cases, and one which shows more prominently than I have ever seen how much the efforts of repair can do when properly seconded by the methods which Lister first taught us were essential. I take no credit to myself, for if my advice had been followed the limb would have been amputated. The patient blindly insisted in leaving the whole matter to the healing power of a healthy constitution, and his confidence was not misplaced. He was a healthy young man of about 20, a total abstainer and without any apparent clog on his vital energies.

He jumped off from the front platform of a tram-car whilst it was in full motion. He fell and whilst falling sought to protect his head from injury by throwing up his arm and placing his hand over his parietal. The flange of the front wheel of the tram grazed his temple and caused an abrasion of the skin from which blood oozed. The same wheel passed over his wrist just above the joint and, as the elbow was sharply flexed. over the humerus in a corresponding situation, close to the head of the bone.

In both places the bones involved were crushed to powder by the steel flange of the heavy car. His faculties were in a most active state, for he tried to snatch his arm from under the next, or rear, wheel, but there was not time, and the second wheel caught him just above the elbow joint, grinding up the humerus just above the joint and the radius and ulna, immediately below the joint as completely as the front wheel had done in other places. The skin was torn and crushed, but there was no marked hæmorrhage. As the accident happened opposite his father's gates and very near my own house, I saw him at once. The mangled appearance of the limb can be better imagined than described. It looked more like a crushed worm than an arm. I advised primary amputation at once. The youth firmly and obstinately declined to sanction it. The parents were appealed to to permit the forcible administration of an anæsthetic and performance of the operation, as their son was not in a position to judge. It was decided to call in another opinion, and the Senior Surgeon to the Hospital saw the case with me. He advised immediate amputation before gangrene rendered the operation impossible. All present urged the youth to consent on the ground that trying to save the limb in all probability meant sacrificing his life. Nothing could move him. He vowed that if his arm was removed against his will that he would promptly shoot himself. On this, his parents consented to absolve us from all responsibility of his death if we would try and do our best to save the limb. I think I never looked on a more hopeless case. It seemed an impossibility.

During the period of all this talk, the mangled limb had been kept in as clean a state as possible. Fortunately his clothing

kept the dirt of the road from entering the wound, and in taking and cutting off the sleeve the most minute precautions were taken to avoid infection. Fortunately his skin and linen were very clean. The wounds were bathed and laved as thoroughly as possible and everything was removed that was detached or useless. I was blessed with a wonderful nurse. I cannot say how often a day the dressings were changed, but no spot of blood or stain was permitted to be on the dressing. She was most attentive, with the result that from first to last, there was never a drop of pus seen, nor was there any pyrexia.

The prominent and interesting points in the course of healing were these. The skin on the flexor side of the arm atrophied and was destroyed from the wrist to the shoulder. About the middle of this, in the region of the elbow, for a breadth of 3 inches there was no skin. For some weeks it seemed as though the parts were completing what I had roughly begun, removing all the useless fragments and preparing for the great work of restoration. A special splint was made which admitted of ready access, perfect fixation and alteration of position, bending of elbow and easy application of dressings. It was a strongly enforced factor that no profitless examination of the comminted bones were made, but everything left as still and motionless as possible. Lister was the light as regards cleanliness. and Hilton's maxims in "Rest and Pain" were strictly followed as regards perfect rest of the injured parts. The skin healed rapidly. but when the granulations had been apparently covered to about $1\frac{1}{2}$ inches on each border. the entire new growth seemed to break down again and leave us as before. But this was only in appearance. Some progress was made and each month a decided improvement could be noticed. Each day the position was changed. One day flexed, one day extended both as to elbow and shoulder. So we went on day by day, until at last we saw the whole area covered by skin. Our joy was short-lived, for on extending the arm again, a large area was again uncovered. It looked as though we were deliberately tearing open the would, but nothing was allowed to interfere with this daily extension and flexion. It seemed to outsiders that we were deliberately prolonging recovery. No entreaty or persuasion prevented the continuance of the same routine. I was resolved to keep it up not only till the skin bore the extension well, but was even quite free from tension. I felt convinced that on this point the success of the whole treatment was concentrated. I was not disappointed, for the most rigorous discipline was kept up until he could flex and extend his own joints without any passive assistance.

He ultimately gained the full use of his arm, could flex and extend, pronate and supinate. The only failure was that the fingers were a little stiff. This was his own fault, as he would not carry out the phalangeal drill as was requested. The most surprising thing was the very small scar that was left. Instead of the ugly puckering one usually sees, it was a faint white patch of a few inches only. How the deficiency was made up I cannot tell. The bare granulation at the commencement extended from the shoulder to the wrist. The faint white non-adhesive patch left looked quite a trivial affair.

After the first few days of oozing, when frequent bathing and washing was necessary, the only dressing employed was aseptic boracic and vaseline, and, as before said, it was a point to remove before soiling, sticking or staining by blood took place. Yet with all this the injured parts were kept at perfect rest. The only movement being at the joint.

The youth said his arm was as good as before, "he knew it would be, as he had excellent 'flesh,' and did not see the necessity of making so much 'fuss' over it."

In all my professional life no case stands out with such prominence as this, as it was a clean cut evidence of what cleanliness and taking pains can do; thrown into lurid prominence by the pre-Listerian years of pus, erysipelas, gangrene and pyæmia.

The entire treatment took many months. It was an absolute necessity to closely supervise the important details of the latter end and see for one's self that they were properly carried out. If left to others, contraction is sure to take place; even though it be a nurse, her position is not strong enough unless closely backed up by the surgeon.

In a future number I will give a case in contrast, illustrating the same essentials.

SENEX.

The Avoidance of Pain in Dental Surgery.

A Paper read before the Dental Society by

H. PAXTON BAYLIS.

Mr. Chairman and Gentlemen,—

Our patients attach tremendous importance to the amount of pain that they receive at our hands. This has been so much in the past that they now come to us expecting to be hurt. There was recently an advertisement in the Personal column of the "Times" in which a reward of £50 was offered to anyone who would adequately deal with two teeth, in an admittedly bad condition, without giving pain. Although, on first thoughts, one was eager to earn the reward it must be admitted, that to do so is exceedingly difficult, if not impossible, with the means at our disposal at present. Comparatively very little of our literature and teaching are devoted to this subject, upon which the success of our practice so much depends.

In the first place it is very necessary to know exactly when the patient is being hurt, and to satisfy oneself at once as to the cause. Involuntary twitchings, and changes of expression are the best indicators of this and a careful watch should be kept for them. The amount of pain patients will admit or even complain of varies so considerably that it is not a sufficient guide.

Putting aside work done under a general anæsthetic, we come to consider the various ways in which pain may be caused, and how best avoided, in conservation work.

To begin with the preliminary manipulations on the patient. The only one that causes pain is the fitting of accessary appliances in the mouth. One comes at once to the question of using the rubber dam. Patients *do* object to it and for the following three reasons. The discomfort and damage it causes to the lips. Pain from clamps and Pain from ligatures. A great number of patients suffer from cracked and sore lips from the rubber dam. This can to a great extent be avoided by adjusting the position of the holder and the tooth in the dam so that the lips are not dragged upon, especially at the angles of the mouth, and also by placing cloths between the dam and the lips. It is very difficult to carry clamps and ligatures sufficiently down some teeth to hold, without causing pain, and for this reason they are much less used in America than here. In this connection Mr. William Finn, advocating the universal use of the rubber dam, writes:—

"With a rubber dam it is not very often necessary to use ligatures as the teeth have been cleaned before the dam is placed, and after the rubber dam is adjusted the teeth are wiped with alcohol and dried. Tuck the rubber dam up under the free margin of the gum with an instrument and, as the teeth are so dry, it will stay there, and as a rule you will need no ligature . . . We only use clamps on the back teeth when absolutely necessary and very often we find it possible to use little rubber bands instead of the clamp, or little cotton pieces or small beads tied on the ligature, and carried into the interproximal spaces . . . When a clamp is used on a molar, see that the cheek is pulled out so that it is not at the back of the clamp . . . a very uncomfortable position, and there is no reason for it, as we are able to have the cheek left in its natural position, and you will find the patients very grateful for this relief. . . . In all this work the assistant is indispensable."

I conclude from the last sentence that, with an assistant, the very desirable object of doing without clamps and ligatures can be attained by having ones left hand free to hold the dam in place.

Pain from manipulations of the gum may be easily reduced or abolished by placing a pellet of cocaine on it for a few minutes.

Coming now to operations upon the teeth; enamel has first to be considered. This tissue can be taken for practical purposes as not being innervated, it also has no direct continuity with the pulp so is not sensitive. The only way that operations on it give pain is by producing heat which is transmitted to the pulp. With care this can be easily avoided. Coating the burrs with vaseline is recommended to reduce their friction and heat.

"As soon as the dento enamel junction is reached marked pain is usually experienced by the patient. Within the area of dentine which lies beyond this zone sensation is lessened until the advancing burr reaches within close proximity to the pulp."

It is necessary to understand how this pain is produced, and the *action* of the different methods of minimising it.

There are two schools of opinion regarding the cause of pain in dentine. The one agreed to at this Hospital, and by Howard Mummery, and Boll, explains the sensitiveness to the "occurrence of peripheral nerve fibres in the dentinal tubuli," which in themselves easily account for sensation and pain on exposure and manipulation.

The other school, which includes Tomes, Hopewell Smith and Retzius, believe that the dentine is not innervated, and that the impulses are carried through the dentine via the contents of the dentinal tubuli, i.e., the abundant protoplasm, of the lymph,

the dentinal fibres, and the peripheral processes of the odontoblasts. They say that "when the dentinal tubuli become exposed to the fluids present in the oral cavity their surface tension becomes altered by external physico chemical influences, osmosis, and absorption, so that they become over-distended. The fluids of the tubuli cannot be compressed as water possesses no elasticity and represents a rigid column which transmits pressure undiminished in all directions and any additional pressure is thus transmitted to the nerve filaments at the surface of the pulp."

The insensitiveness of carious dentine is accounted for by the complete disorganisation and absorption of the tubuli and their contents.

The hypersensitiveness of the amelo dentinal junction is explained by "the interglobular spaces of Czermak, filled with semi fluid protoplasm, transmitting stimuli over a relatively large surface area."

For *practical* purposes it is best to consider these causes as all being factors in the production of pain, the nerves present and responding to direct stimuli, and the rigid column of protoplasm in the tubuli capable of transmitting pressure or causing pain by changes in the pressure exerted by their contents, as by osmosis when they come in contact with sweet but non-irritating substances.

The following are the means of minimising this pain:—

1. Sharp, large, and quickly cutting instruments.—Chisels and excavators cutting at right angles to the tubuli are preferable wherever possible. Engine burrs should be used at a high speed, touching the surface lightly, large burrs give much less pain in the end than smaller ones. These methods act by reducing the pain caused by heat, pressure on the tubules, and direct stimulation of terminal fibres.

The dentino enamel junction can be cut out with the least pain by quickly making a small hole through it. Into this is put a fissure burr revolving at a rapid engine speed. With this burr tracks are then cut through the junction until sufficient is cut away. In this way it is cut edgeways, without direct pressure towards the pulp. Another method is to cut it out entirely with a fine stone on the engine.

2. Dehydration.—This is accomplished by applying hygroscopic fluids as alcohol or glycerine to the dentine and then thoroughly dessicating with warm air. This prevents pain being produced as explained above by pressure upon, and over-distension of, the protoplasm of the tubuli, and finally by destruction of the living protoplasm itself. This method gives good results, but is difficult to carry out without itself causing pain. The following conditions should be complied with:—

The process should not be hurried.

It should be continued until the dentinal walls of the cavity have become distinctly lighter in colour.

That the current of air should not be perceptibly above, or below the temperature of the dentines. This cannot be accomplished unless the nozzle of the syringe is of a uniform heat, is held a uniform distance from the dentine, and has a constant current of air. These requirements cannot be secured with the hand syringe, but require an electrically heated one with a mechanical air supply if the patient is not to be given any pain.

3. Cauterisation.—This is carried out by applying substances which destroy living tissue. If they are to be placed in deep cavities near the pulp they should be self-limiting, that is their action should be localised by their products. The most important of these are ethylate of sodium, phenol, silver nitrate, which, by the action of light, discolours the teeth, and zinc chloride, which is not self limiting. They precipitate albumin in the tubules and on this the self limiting action depends. Their action, however, is very superficial and they have to be applied repeatedly as the preparation of the cavity progresses.

Robinson's remedy consists of equal parts of potassium hydroxide and crystallin phenol.

Buckley's desensitising paste and Norwegian dentine anæsthetic are both considered to be dangerous to the pulp.

For desensitising soft dentine liquid ethylate of sodium is the most useful drug of all to apply. It desensitises by its caustic action. Some slight degree of aching may be felt during the five minutes that it takes for its action to take effect. This aching can be quickly stopped by a drop of carbolic and menthol applied on wool.

4. The application of protoplasmic poisons.—These are arsenic and paraform. Arsenic is not self limiting and its action so often continues beyond the dentine to the devitalisation of the pulp that it has had to be given up. Paraform is to a certain extent self limiting in that it is converted into formaldehyde, which becomes fixed by its own action. It is mixed in a three. five, or ten per cent paste with zinc oxide and oil of cloves and left in the cavity for a variable time, according to the strength used and thickness of dentine to be desensitised.

5. The production of cold.—Cold has a marked numbing effect upon dentine and is obtained by the application and evaporation of chloroform, ether, ethyl chloride, liquid air, liquid carbon dioxide, or carbon dioxide snow. Unfortunately, they all cause so much pain during their application that they have not been adopted to any extent.

6. Local sedatives and anæsthetics.—"True local anæsthetics as cocaine, or its substitutes, when applied to exposed sound dentine without pressure

do not produce any pharmacologic effect. Even if sealed into a fairly deep seated cavity in which the underlying dentine is not decalcified no effect is obtained."

This is accounted for by the *relative* rate of action of the protoplasm upon the drug and its speed of penetration. Protoplasmic poisons, as demonstrated by adding methylene blue to them, penetrate sound dentine only at the rate of 5 mm. in 29 hours. Now the effect of a local anæsthetic in the tissues wears off in an hour as it is then "decomposed by the ferments of the living protoplasm." Thus it is seen that the drug is decomposed before it can get deep enough to have any useful effect. The case is different when pressure is applied as "the vital resistance of protoplasm is readily overcome by comparatively slight force." Hence we have Mr. Wilton Thew's method of injecting local anæsthetics into the dentine with a special syringe whose needle fits accurately a small hole previously drilled into the dentine.

Amongst the sedatives must be included the various essential oils as the oils of cloves, cinnamon, and peppermint. "They possess marked penetrating power, but are of little value upon a fairly thick layer of sound dentine. "The pharmacological action of oil of cloves depends on the presence of engenol, whose basic constituent is para-amidobenzoic acid, whose methyl ester anæsthesin is an efficient local anæsthesia and is allied to novocaine."

The more one considers the above methods the more one realises that although they are in universal use, none of them are quite painless and any of them may *even cause* considerable pain to the patient. As they are therefore far from efficient, some better method should be sought for and practised. It is in this connection that the anæsthetising of the whole tooth by injecting its nerve supply with a local anæsthetic is proving of such use to the operator, and relief of unnecessary pain to the patient.

Leaving this question for the present let us consider, from the point of view of the pain given to the patient, the different methods we have of rendering the pulp insensitive for the only operation we have to perform upon it, namely, its removal. These methods are three:—Devitalising with arsenious acid, anæsthetising by a pressure anæsthesia, and blocking the nerve supply from outside the tooth.

Devitalisation claims not to abolish, but only to minimise the pain given which varies considerably in different cases and has the added disadvantage of occurring when the patient is not under observation.

The results obtained by pressure anæsthesia are again very variable and in some cases it is a complete failure. This method also is admittedly painful to most patients, in fact is said "to be of less discomfort if the patient do apply his own pressure by biting on a piece of orange stick placed between the teeth with one end pressing on the material in the cavity."

With reference to its frequent failure it is most important to remember that the efficiency of the method is impaired by "chronic inflammation, polypus, secondary calcification, tobacco chewing, in worn, abraded or eroded teeth, in teeth whose canals are obstructed by pulp nodules, and teeth of old people. In most of these cases no amount of persistent pressure will prove successful." Of equal importance is the fact that previous application of the coagulants of albumin, as tannin, silver nitrate, and phenol, cause a similar difficulty by forming a protective layer over the pulp.

The third method is by blocking the nerve supply from outside the tooth by injecting a local anæsthetic. Here again this method is by far the least painful to the patient and is now more and more replacing the first two methods.

We now proceed to fully consider the question of local anæsthesia for dental operations. Experience has decided on a standard type of syringe to use and that novocaine, together with adreniline chloride, is the best drug available.

The novocaine is dissolved in normal saline and synthetic adreniline chloride of a strength of 1 in 1,000 is added in the proportion of 1 m. to each c.c. Although this proportion is definitely established the strength of novocaine used successfully by different operators varies. In this connection it must be remembered that the time taken for the drug to be effective varies according to its strength, and the tamount injected. Usually one tablet of novocaine, $\frac{1}{4}$ grain, with adreniline chloride 1/1200 gr. is dissolved in 20 m. of normal saline. This gives a $1\frac{1}{2}$ per cent. solution of novocaine. The effective dose of novocaine is 1/3 gr., which is 27 m. of $1\frac{1}{2}$ per cent. solution. The maximum dose is 1 grain for the patient in the erect position and 2 grains have been well tolerated in the supine position.

The technique of local dental anæsthesia is by no means a simple matter. In "Anæsthetics in Dental Surgery," by Coleman and Hilliard, we read:—

"When infiltration analgesia is used for the purpose of extirpating a living pulp from a tooth or for decreasing the sensibility of dentine, or rendering painless other operations on the teeth themselves the drug employed must reach the terminal branches of the fifth nerve, entering the apical foramen of the teeth. In many cases when the surroundings of the tooth are well infiltrated as for an extraction, the pulp of the tooth is likewise rendered anæsthetic, and may be removed painlessly, in other cases, while

the periosteum of the tooth socket is anæsthetic the pulp retains its full sensibility. It is difficult to reconcile these facts as the two conditions occur in apparently similar circumstances."

From this one may conclude that infiltration anæsthesia, though very suitable for extractions, is not reliable for operations on the tooth. Now when a tooth is extracted, no pain is felt as a result of the rupture of the nerve entering its apex, but pain is produced by trauma to the gum and the bone of the alveolar process. Describing the technique of local anæsthesia in the Science and Practice of Dental Surgery it is stated that "Care should be taken that the needle does not strike the bone as not only is there danger of the needle breaking, but also very little fluid is able to escape in that position." Thus it is made clear that the injection is into the gum only, which is thereby anæsthetised, while the bone of the alveolar process is anæsthetised by the pressure infiltrating it. The infiltration has to continue further still to reach the apical nerve which occurrence is not constant. This is the reason why alveolar infiltration anæsthesia so often fails to desensitise the tooth itself.

There are four methods available for anæsthetising the terminal branches of the fifth nerve entering the apices of the teeth, and thus making the whole tooth insensitive. They are:—

1. Parrott's Method.—By this method the gum is first anæsthetised by injecting a few minims of 2 per cent. novocain solution. A perforation is then drilled through the soft tissues and the outer layer of the cancellous bone. A special syringe is fitted with a needle having a bevelled point which accurately fits the hole in the bone made by the burr and 4 to 5 minims of the previous solution are injected into the cancellous bone. This method has been used a good deal in the past, but compared to the two following methods "appears a little drastic for the preparation of a cavity or the removal of a pulp."

2. The Sub-Periosteal Method.—In this the needle is inserted midway between the gingival margin and the position of the apex of the tooth with its opening facing the bone. "Injecting as it goes the needle is forced through the gum tissue *and periosteum* and along the alveolar bone towards the apex of the tooth. Fluid is thus deposited under pressure close to the bone on its upward and return journeys." It is necessary to wait 5 to 10 minutes for it to take effect. This method is contra indicated with inflamed tissues, or with an abscess, as it is painful, and the anæsthetic injected into inflamed engaged tissues is too quickly absorbed, and general poisoning and extension of the infection results. "If a tooth is affected by diffuse or suppurating periodontitis a distal and mesial injection usually produce successful anæsthesia by blocking the sensory nerve fibres in all directions."

3. In the third method the needle is inserted into the interproximal papilla and carried down into the *periodontal membrane between the tooth and the* alveolar process. To gain access with teeth set close together slight separation with an orange stick is found to be an advantage. More force and less fluid are required than in the previous method.

"This is the purest form of local anæsthesia of the whole tooth since the seat of the nerve supply of the tooth is quickly reached and the results obtained in the majority of cases are extremely satisfactory." It is the most generally indicated method of the four though acute inflammatory conditions of the *periodontal membranes* and their sequellæ contra-indicate its use.

4. Regional anæsthesia unfortunately requires more exact surgical skill than the above. It is absolutely indicated when the anæsthesia required is for several teeth in the one region. This method has been so aptly described to the Society on a previous occasion that there is no need for more now to be said.

With these methods at our disposal there is no doubt that if we take the trouble to employ a suitably chosen method to anæsthetise, at least the *more sensitive of the teeth we operate upon, our* ptaients can be saved a tremendous amount of pain.

The objections to local dental anæsthesia are:—

1. That it takes too much time and trouble; this can be overcome by having the necessary material always laid out ready for immediate use and sterile.

2. Bad after effects, as sloughing of the gums. With proper aseptic methods and care not to inject into tissues already infected these cases should be even more rare than they are at present.

3. After Pains. The reasons for these are obscure, though they are produced in all cases where solutions which are not isotonic are injected into living tissues.

4. The pain caused by the prick of the needle is minimised by pressing on the dry gum for one minute, a saturated solution of novocain, on a pledglet of wool.

It must not be forgotten that the lips are not affected by a local dental anæsthetic and any pressure on them by forceps when extracting will be painful.

When it is necessary to open the pulp chamber for purposes of drainage in cases of acute inflammation it is found that the tooth which has to be drilled through is very tender even to touch. To render the drilling painless hold the tooth firmly by applying lightly around it a splint made either of a small piece of metal filled with plaster of Paris or a piece of modelling composition.

Finally, we have the problem of how to deal with the very highly strung and nervous patients. One would gain a great deal with them if they could be well under the influence of some cerebral depressant at the time of operation. Unfortunately, morphia, which is the best drug to use for this purpose has to be administered by a hypodermic injection to act quickly and well, and the danger of addicting a nervous patient to the drug habit is so great as to prohibit its use in this way. It is in this respect that we are at a disadvantage compared with general surgery where morphia is so commonly used.

The cerebral depressants given by the mouth take between a quarter and half an hour to take effect. Bromural is now available for dental use and one tablet is said to produce considerably diminished sensibility at the end of half an hour.

When we consider that all these means are available for our use, it is only reasonable to conclude that the public, who choose to go to the dental surgeon who gives the least pain, thereby also succeed in choosing the one who is the most conscientious and efficient.

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A Case of Ulcerative Colitis probably due to Bacillary Infection.

In England sporadic cases of bacillary dysentery in which one is definitely able to determine the causal organism and pursue a radical and successful treatment are rare; therefore the details of the following case seem worthy of record.

V. K., a female, æt. 28, was admitted into Esther Ward under the care of Dr. Fawcett. on February 4th, 1923. From the beginning of the year she had been suffering from severe diarrhœa with abdominal pain, incontinence of fæces, tenesmus and the passage of considerable quantities of blood and mucus in the stools. Her bowels had been opened 6 to 9 times per diem. There had been intermittent pyrexia (97° to 101·5°) and a quick pulse (108). The patient had never been in any zone where dysentery is endemic or epidemic, but $2\frac{1}{2}$ years previously she had had a similar, but milder attack of a fortnight's duration. The present symptoms were heralded by constipation for five days.

On admission the general appearance of the patient did not betray the severity of her symptoms, there being no great loss of flesh. There was some pyrexia (101°) and an accelerated pulse (105). Palpation of the abdomen revealed nothing abnormal; both spontaneous pain and tenderness were absent. The stools were typically "dysenteric"—small in amount, watery in character, containing no fæcal material, but abundant mucus, cellular debris, blood and pus. The patient was put on a farinaceous diet, honey and chocolate also being alllowed. Irrigation of the colon with normal saline was begun and charcoal was given by the mouth.

Laboratory investigation failed to reveal either amœbæ or cysts. Cultivation of the fæces gave but growths of bacillus coli communis and streptococcus fæcalis. Agglutenation against the Shiga-Kruse bacillus gave no assistance, but positive results were obtained against the Flexner type in a dilution of 1 in 200.

Dr. Ryle investigated the condition of the bowel with the sigmoidoscope and found the mucosa deeply injected and œdematous. It was extensively studded with ulcers which in shape and size varied from a lentil to a pea. Their outline was definite and no infiltration was seen about their borders. Bleeding points were numerous. Apparently only the mucosa was involved. Swabs from the ulcers gave bacillus coli communis.

Treatment with polyvalent anti-dysenteric serum was begun on February 15th, 1923. The initial dose was 40 c.c., given intravenously in saline after precautionary desensitisation. The effect was almost magical and during the 36 hours that followed the injection only one stool was passed, as contrasted with five on the 14th. Further injections of 40 c.c., 60 c.c., and two of 80 c.c. were given on February 16th, 17th, 19th and 20th. On the 19th there was a fully formed stool and since then the stools have become normal, both as regards number and character.

Dr. Ryle again inspected the bowel on February 27th. No ulceration was seen; the mucosa was granular.

The patient is now (March 3rd) on a light mixed diet including fish and chicken, especial care being taken to avoid all mechanical irritants like pips, and skins of fruit, raw fruit and vegetables. Regular soft motions are secured by the administration of liquid paraffin. The patient is increasing in weight steadily. There have been no complications of which at this stage peripheral neuritis is the most common.

It is to be noticed that the sole evidence of bacillary dysentery was the agglutenation reaction, as a bacillus dysenteriæ was not found either in the motions or in cultures made from swabs taken by Dr. Ryle from the ulcers during sigmoidoscopic examination. Thus the *absolute* proof of the infective cause is incomplete, although the satisfactory result of the treatment adopted was surprisingly rapid and left no shadow of doubt of its value in our minds. We may here recall the interesting cases of ulcerative colitis published by Dr. Hurst in the first number of the "Guy's Reports" (Fourth Series, Vol. i.) in which no dystentery bacilli were discovered nor any agglutination produced with the usual forms of dysentery bacilli and yet treatment with anti-dysenteric serum was as successful as in the case above recorded.

Is the good effect of treatment by this serum in such cases due to the foreign protein introduced into the blood stream rather than to specific effect upon the bacilli or their toxins?

R. R. M.

Reviews.

Surgical Tables. By Maurice C. Anderson, L.R.C.S. Edin. (Messrs. H. & C. Black, Ltd., Soho Square, London). Price 3s. 6d.

This book is intended as an aid to those students who are preparing for their examination in surgery, and as such is excellent. To misuse it as a "cram" book would be to defeat the author's purpose, but to carry it with one to the out-patient department and museum will enable the student to find at a minute's notice a full and concise summary of any surgical subject that is likely to be asked at the examination. The book is full of tables of differential diagnosis and is in every way admirable for its avowed purpose. On page 69, under the heading of "Epithelioma of Tongue," the paragraph on treatment begins, "Early and free *incision* is the patient's only hope," but this is the only error that we have detected.

Nursing and Diseases of the Eye. Jessie Elms, A.R.R.C., Matron, Sussex Eye Hospital, Brighton. (Scientific Press, Ltd.). Price 2s. 6d.

This is a valuable little book. Probationers and fully-trained nurses will find is most useful.

The articles on Diseases of the Eye is brief and concise, but quite sufficient to render it understandable for ordinary nursing purposes.

Chapters three and four deal with ordinary nursing and method of treatment, which is clearly described and easy to follow, even to nurses who have not taken a special course in ophthalmic nursing.

Theatre work and preparation of instruments for different operations on the eye are adequately described, and should prove of great assistance to nurses interested in theatre work.

It is especially interesting to have the instruments illustrated, as in the last chapter, where sets of instruments are tabulated for every operation on the eye.

This book is inexpensive and every nurse should secure a copy.

Skin Diseases. By G. Norman Meachen, M.D., Southampton Street, Strand, London). Price 3s. 6d. B.S., etc. (The Scientific Press, Ltd., 28 and 29, net.

This book is written chiefly for nurses, but will be found useful by any one who wishes to have in a small book of 131 pages an epitome of modern knowledge of skin disorders. The appearances, diagnoses and treatments of the various diseases are clearly described, and the book is thoroughly recommended as an elementary text-book.

Papers by Guy's Men.

A. F. Hurst, M.D., and another. The Pathogenesis of Sub-acute Combined Degeneration of the Spinal Cord, with special reference to its connection with Addison's (Pernicious Anæmia, Achlorhydria, and Intestinal Infection).—*Brain,* xlv., 1922, p. 266.

J. A. Ryle, M.D., M.R.C.P. Reflex Signs and Symptoms in Disease of the Hollow Viscera.—*Clinical Journal,* lii., 1923, p. 123.

Inter-Hospital Hockey Cup Final.

GUY'S v. KING'S COLLEGE HOSPITAL.

(Inter-Hospital Hockey Cup—Final).

Played on the Hampstead H.C. ground at Richmond, on Tuesday, March 20th. The weather conditions were ideal for a fast game, and Guy's opened strongly. After ten minutes' play Schollum opened the scoring from a good centre from Hunt. Guy's continued to press and the forwards combined well, and soon forced a corner from which Owen scored with a high shot, completely beating the goal-keeper.

King's now pressed strongly, but their stickwork was indifferent and they were weak in the circle. At length Bonnalie relieved the pressure and Hunt dribbled the ball well up to the opposing circle and passed. Schollum, with a fine shot, just failed to score, the ball hitting the goal-post and being deflected away. The interval came with Guy's leading (2—0).

On resuming King's made several onslaughts on our goal—Jones and Livingstone being prominent in their attack—and after Dunnill had stopped a hard shot, Bockington netted for King's from a scramble in the goal mouth. Guy's now woke up again and with the slope in their favour began to look dangerous. Hunt broke through from Bully-off, dribbled down the wing and centred hard for Owen to score a fine first time goal.

King's now retaliated and our defence had some anxious moments, but both backs tackled keenly and cleared strongly.

Parkinson, at centre-forward, worked his forwards well and an individual run by him resulted in a fourth goal. A few moments later the same player put the issue beyond all doubt with another fine shot. The game continued fast and strenuous to the end which came with Guy's victors by 5 goals to 1.

In this game the whole Guy's team played in great form. The forwards showed unexpected gifts of combination, and their speed and good stickwork had the King's defence guessing in the second half. The halves worked manfully from start to finish with Kempe perhaps the pick of the line. The backs covered each other splendidly and showed a perfect understanding, while their hitting was always clean and hard. Dunnill in goal, though not often tested, came well out of the ordeal.

This is the seventh time that Guy's have won the Cup, the last occasion being in season 1912—13. King's had defeated the previous holders, St. Thomas' in the semi-final (1—0).

Guy's Team.—D. E. Dunnill; M. F. Awdrey, F E. Graham-Bonnalie; A. C. Kempe, K. Hooper, J. G. Kingsbury; W. S. Hunt (Capt.), J. W. Schollum, N. Parkinson, L. E. Owen, L. J. Barford.

Inter-Hospital Boxing Competition.

After a long, chequered and inglorious career, we have achieved the summit of our ambition. We are a special correspondent. More, we are a special boxing correspondent, like "Long Melford," though we are more of the dimensions of a melton mowbray. It was like this: After dinner one evening we happened on a very high official of the Boxing Club, wearing a haggard look and asking for a special correspondent. "We are a special," said we—quite truthfully, for have we not a bludgeon and whistle hanging in the Hospital Constabulary cupboard?—and our "we" and his dinner induced him to part with two perfectly good tickets for the front row of the National Sporting Club. This was fortunate, as it enabled us to take as friend, counsellor and pay-clerk our old colleague, the editor of the poetry supplement.

The National Sporting Club is a very manly building, and to sit in it is to feel good. As the poetry supplement said, "Gosh! I feel devilish tough!"

There we sat, feeling as tough as two trivets, and took in the spectators. The majority wore morning dress, the élite wore evening dress, the five ladies present wore gossamer creations, and three men wore caps throughout the evening.

Being one of the most peaceful of His Majesty's subjects, we know little of the finer points of fisticuffs, but in all sincerity, and aided by the poetry supplement, we give a true account of the 26 Fights to the best of our ability.

Fight 1.—*Welter.*—C. P. Blacker (Guy's) v. R. V. Bowles (U.C.H.).

Round one was uneventful. Blacker slapped Bowles' face and was told by the referee to "make a fist." He complied and won the round. In round two, Bowles knocked double-knocks on his opponent's epigastrium, but forgot about his own face, on which Blacker ran up a comfortable number of points. Round three saw Bowles' eyes black and the winner Blacker.

Fight 2.—*Light Heavy.*—N. M. Holloway (Guy's) v. L. Colenso-Jones (Bart.'s).

Holloway showed a beautiful defence during the first round, kept the enemy well at bay and won a good boxing bout. Round two was even, with Holloway a point or two the better, but round three was a real old clackerjack for Guy's and a fine exhibition of pluck by Colenso-Jones. Holloway won.

Fight 3.—*Light.*—E. G. Rovevere (Thomas's) v. F. E. Schneider (U.C.H.).

This was Schneider's benefit and the fight was stopped early in the second round.

Fight 4.—*Welter.*—R. A. Vaughan-Jones (London) v. T. M. Marcuse (Bart.'s).

The first round introduced us to "in-fighting," which must be pretty bad on an empty stomach, but after dinner ——! Anyhow, they seemed to thrive on it, and, after Marcuse had won the first round, they shared the second between them. That was where Vaughan-Jones went wrong. He ought to have won it, because he lost the last chukker and the fight—but he, too, was tough.

Fight 5.—*Light Heavy.*—M. S. Dewhurst (U.C.H.) v. A. J. Smythe (George's).

This little fracas kept the bookies laying for safety. First Dewhurst was reduced to a spirillum with two pendulous flagellæ, so that hardened old ring-siders dropped tears and wished the lights would fuse. Then, would you believe it, he re-galvanised himself into human form and set about Smythe in such a careful manner that he hit hard and individually every surface marking on his skull and set it rocking until Smythe got vertigo and the bell rang. Round two saw the honours divided, but round three went to Smythe, who won a really good hard-hitting combat and probably still retains signs of it.

Fight 6.—*Light.*—J. G. S. Thomas (Guy's) v. M. J. Malley (Bart.'s).

Thomas is a disciple of Nijinski—or is it Stanley Lupino. Always on his man, never off his balance and only twice on the floor, he won handsomely both in style and points and was springing around as gracefully at the end of the fight as at its beginning.

Fight 7.—*Feather.*—H. S. A. Simmons (Middlesex) v. G. K. Thornton (George's).

This was the hardest left and right contest of the evening. Simmons can pile it on as hard as any medicine man we know and Thornton can take as bitter a pill as he will ever be called upon to prescribe. Simmons won, but he had to go all out for the verdict.

Fight 8.—*Bantam.*—S. A. Romain (London) v. M. K. Braybrooke (George's).

Romain is a past-master at ducking and "slipping," a technical word for which we take no responsibility. So he slipped and ducked and bobbed about, while Braybrooke signalled his contempt in semaphore and occasionally fortified it with a punch on the head. This went on for three rounds, and the judges disagreed, the referee giving the verdict in favour of Romain.

Fight 9.—*Bantam.*—M. Kotkin (Middlesex) v. A. Lewis (Guy's).

This was a welcome change from the rough play of the previous fights, and was reminiscent of "Polly." Round one was an old English minuet, with Kotkin taking the prize for nimbleness, and Lewis gaining distinction for deportment. Round two produced a gavotte, stately, finished and full of grace. Advance, hands to the centre, pirouette, retire, bow to partners, and—refreshments in the corner. Round three looked promising. Was it to have been a polka or Sir Roger de Coverley? Alas, we shall never know. The referee, most prosaic of men, forbade further dancing, which so upset Lewis that he set about his dancing partner with much animosity and finished him off in no uncertain manner.

Fight 10.—*Fly.*—M. T. Aung (Guy's) v. E. V. Barkin (Bart.'s).

This was a popular bout and went to Aung, who boxed well and thoroughly deserved his victory.

Fight 11.—*Middle.*—W. S. Gross (George's) v. M. C. Lavin (London).

There is something written about a chappie, who was master of his fate and captain of his soul. That chappie was Gross. You can knock his face to pieces and mix him all up like a ward jig-saw puzzle, but you can't capture his soul, and a very humorous, jolly old soul it is, too. And so, each time that Lavin knocked him down, Gross beamed around as though he preferred it to all modern amusements, and was still looking thoroughly happy when the fight was stopped in the second round.

Fight 12.—*Middle.*—H. Trafford (Guy's) *v.* G. A. Rossdale (Bart.'s).

Rossdale is a hefty hitter, and trounced Trafford in a most uncomfortable manner throughout the first round. After that Trafford got going and steadily piled up points, taking the heaviest blows on his arms and gloves and getting in a good many on his own account. It was a close fight, and the judges disagreed, but the referee came in on our side and gave the fight to Trafford.

Fight 13.—*Light.*—J. G. S. Thomas (Guy's) v. K. H. A. Gross (George's).

Gross tried to get in to have a good old rough-and-tumble, but Thomas wasn't playing. He kept his opponent at bay, and wore him down by fast boxing, the fight being stopped in the third round.

Fight 14.—*Light.*—F. E. Schneider (U.C.H.) v. A. C. King (London).

This fight was Schneider's all the way, the referee stopping it in the second round, when King went down for the second time.

Fight 15.—*Welter.*—J. T. Woodhead (George's) v. T. M. Marcuse (Bart.'s).

Short and sharp. Woodhead was knocked out in the first round.

Fight 16.—*Welter.*—C. P. Blacker (Guy's) v. P. de R. Pearse (Middlesex).

Blacker led throughout each round and must have won with a big margin of points, but he appeared to be very tired towards the end of the fight.

Fight 17.—*Feathers.*—M. Sperber (London) v. J. D. S. Thomas (Guy's).

Sperber is a great leaner. He leaned so much that the referee had to interfere, but he fought well against the redoubtable Tommy, who won, but not too easily.

Fight 18.—*Feather.*—K. P. Hare (U.C.H.) v. H. S. A. Simmons (Middlesex).

This was the second appearance of the tempestuous Simmons. Hare was game, as one would have expected, and took far more than his share of punishment, but Simmons' sledge-hammer left wore him down, and he retired in the second round.

Fight 19.—*Heavy.*—E. S. Vergette (Bart.'s) *v.* G. Milne (London).

This was the only heavy contest during the evening. Vergette was sufficiently well known to be favourite, and won the first two rounds with something to spare, but in the third round Milne put up a splendid show and did not lose by a very big margin of points.

Fight 20.—*Light Heavy.*—N. M. Holloway (Guy's) v. A. J. Smythe (George's).

Had this been the chief event of the evening, we should have demanded back our money. Holloway advanced to the centre of the ring, shook Smythe warmly by the hands, knocked him down, and carried him back to his corner. We always wondered why the scrum made such headway, when Holloway was in the first row. Now we know.

Fight 21.—*Bantam.*—S. A. Romain (London) v. A. Lewis (Guy's).

This was a great triumph for Lewis. Romain with all his great skill in ducking, could not avoid his opponent's blows, and was well beaten in each round.

Fight 22.—*Fly.*—M. T. Aung (Guy's) *v.* E. L. Auguste (Middlesex).

We were very anxious for Aung to pull off this final. He is such a clean boxer and has such a taking style. But he was up against a good man, who had, moreover, an advantage in reach and was fresh, while Aung had already fought three hard rounds. All praise to the winner, who fought well; but the result had to be referred to the referee before Auguste was proclaimed fly-weight champion, and Aung got a great ovation on leaving the ring. He also blacked the eye of his coloured opponent—an original and meritorious achievement.

Fight 23.—*Middle.*—M. C. Lavin (London) v. H. Trafford (Guy's).

Up to this point we had piled up marks for perspicacity by announcing the results to our poet before they were published from the ring. But in this fight we went badly astray. Round one was slightly in favour of Trafford, round two decidedly went to him, and in round three he showed himself to be slightly better than Lavin. So when the judges disagreed we were surprised, but when the referee gave the fight to Lavin—well, we just had to remember that we are no boxer, and that there is much more in the game than is apparent to a special correspondent.

Fight 24.—*Light.*—J. G. S. Thomas (Guy's) v. F. E. Schneider (U.C.H.).

This was a wonderful fight. Thomas displayed the greatest skill and ring-craft and fought a very tough opponent to a standstill. The first round was even, but after that he got the upper hand and showed, not only beautiful boxing, but extreme fitness, which enabled him to keep up a fast attack to the end.

Fight 25.—*Welter.*—C. P. Blacker (Guy's) v. T. M. Marcuse (Bart.'s).

This was not as good a fight as most. There was too much holding, and Blacker appeared to have become tired after his other two fights. We are told that he had to take off weight in the last two days and was stale. The judges disagreed, and the fight was given to Marcuse, a decision with which we and the poet concurred.

Fight 26.—*Feathers.*—J. D. S. Thomas (Guy's) v. H. S. A. Simmons (Middlesex).

This was the last fight of the evening, and the one about which there was most anxiety among the Guy's supporters. Could Thomas stand up against the terrible hammering of Simmons' left? It so happened that he did not have to try, for that left was never given an opportunity to hammer. Like his brother, Thomas was as fit as a fiddle, and kept well away from any kind of in-fighting. The way he escaped from awkward corners was amazing, and all the time he was scoring fast with both hands. We do not intend to suggest that Simmons was not in the picture. He was, and put up a rattling fine exhibition, but Thomas out-boxed him and out-stayed him too, and why the judges had to refer the matter to the referee was another little puzzle for which we have not yet found the solution.

There you are, Mr. Boxing Official! There is our account of the evening's entertainment. It had a very quieting effect on our poetical colleague, who became unusually pensive towards the end. We thought that he might be suffering from hunger pains, but on the way home he confided to us that he had perpetrated a ghastly thing, entitled, "The Way to Victory." It commenced something like this—

Oh! were I twice the man I am,
And were I tough as teak,
I would comport me as a lamb
And turn the other cheek;
And, lest he tried to put me through it,
I'd always call Alf "Mr. Hewitt."

Fortunately we have forgotten the rest of this abomination, and, with great pride, append the final scores, counting four for a win, and two for a runner up—

1. Guy's, 22 points; 2 and 3. London and Bart.'s, 8 points; 4. Middlesex, 6 points; 5 and 6, George's and U.C.H., 2 points.

Change of Address.

V. E. Lloyd, 23, Welbeck Street, W.1 (Phone: Langham 2755).

H. Clarke, M.B., Wakefield Lodge, Christchurch Road, Reading.

E. H. Richards, M.B., B.S., 10, Braxted Park, Streatham Common, S.W. 16. (Telephone Streatham 3473).

A. Ll. Spencer-Payne, M.R.C.S., L.R.C.P., L.D.S., 88, Park Street, Grosvenor Square, W.1. (Telephone Mayfair 2024).

Birth.

CROOK.—On March 19th, 1923, at Reka Dôm, Highbury Avenue, Prestafyn, N. Wales, to the wife of F. W. Crook, M.R.C.S., L.D.S., a son.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 907.] April 14, 1923. [Ninepence.

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Passim.

IN this issue we introduce a new feature in the shape of a competition in connection with a Health First Campaign. As will be seen the competition had its origin in certain remarks made, during a debate in the House of Commons, by Mr. Frank Briant, M.P. for Lambeth. During the war, when almost every man of military age was submitted to a medical examination, we had ample opportunity for observing that the average national standard of physique was not as high as it should be. No doubt much of this deterioration is due to the various forms of sedentary occupations which have sprung into existence as a result of that which we choose to look upon as the advance of civilisation. In many industries also the conditions, as regards health, under which men and women are compelled to work, are far from ideal. But apart from these questions there is room for personal improvement on all sides.

In a large hospital we are primarily concerned with the health of the patients who come under our care, but we presume it is the ultimate aim and ideal of the medical profession to commit suicide by working towards the attainment of a modern Utopia in which there will be no illness or disease. The science of eugenics grows from day to day and the importance of good health in all branches of the community now tends to rank as a matter of the greatest concern. Much has already been done to improve the general standard and we will quote, particular though they may be, the ante-natal clinics and welfare centres as only two examples amongst many others.

In any national campaign, the object of which is to arouse voluntary enthusiasm on some particular subject, such as recruiting or war savings, the art of advertisement plays a great and predominant part. In this way by the use of sentences, or, to use a semi-political term, slogans, which grip the public mind, the organisers of any future Health First Campaign will be able to achieve their objects. The GAZETTE competition has thus been started with the object of obtaining such material on which to base a suitable health campaign.

The actual details of the competition appear on another page. The sum of £10 has been granted anonymously towards the prize fund and the GAZETTE Committee has voted a further sum of the same amount. The prize fund thus consists of £20, which, together

with part of the entrance fees, will be divided amongst the three prize winners. All surplus entrance fees will be devoted to the funds of the Hospital. Mr. Frank Briant, M.P., Col. Fremantle, M.P., who was at one time Editor of the GAZETTE, and Dr. Lauriston Shaw have kindly consented to act as judges and will help the Editor to decide on the allocation of the prizes.

We trust that all our readers will enter for the competition and that they will also make it known amongst their friends. The closing date for the acceptance of entries will be announced later.

OUR heartiest congratulations to Mr. M. E. Shaw, who has, at Oxford, been awarded the Radcliffe Travelling Fellowship, of the value of £300 a year for two years, and also to Mr. E. F. Hewlitt, who was recently awarded the British Medical Association prize for his essay on the "Diagnosis and Treatment of Jaundice, due to Obstruction of the Larger Bile Ducts."

WE publish elsewhere in this issue an appeal to all Guy's men for help in the establishment of a memorial to the late Dr. Reginald Koettlitz. He was a Guy's man who, towards the end of the last century, took part in many of the Arctic and Antarctic Expeditions and, as will be seen, his services on those occasions, both to his fellow men and to science in general, met with the greatest appreciation from the leaders of those expeditions. He returned in 1904 to South Africa where he set up in private practice, but unfortunately he died soon after, his death being followed, a few days later, by that of his wife. At the present time only a mound of earth remains to mark his grave and we feel it is only right and desirable that some memorial should be placed in the local church and on the grave of a "man who was a sterling, modest, upright and loyal character, and who had devoted so much of his life to the advancement of science and exploration without seeking notoriety or reward." We are sure that all Guy's men will endorse this view and that the present appeal will not be made in vain. Two subscriptions of five guineas each have already been received towards the memorial fund and any further subscriptions from five shillings upwards will be sincerely welcomed.

THE problem of the maintenance of the voluntary hospitals has been again brought to the fore by the publication of a financial reconstruction scheme for the Scottish voluntary hospitals by Sir George Beatson, who was formerly Chairman of the Scottish Branch of the British Red Cross Society. We print in this issue an article by the Superintendent on the present position of Guy's and on the possibility of an increase in revenue from an increase in the number of paying patients, such as is advocated by Sir George Beatson. We hope in a future issue to consider more fully the plans which he puts forward and their relation to the present policy of the London hospitals.

THE Guy's Hospital Biennial Dinner will be be held this year on Wednesday, October 17th, at the Connaught Rooms, when Mr. G. Bellingham Smith will be President. The thanks of all concerned are due to Mr. A. W. Ormond, who is again undertaking the arduous duties of organising the dinner. We hope to publish further details in a later issue and trust that all Guy's men who wish to attend will communicate with Mr. Ormond as soon as possible and thus facilitate his task.

WE notice that the vandals have once more concentrated an attack on the College Reading Room, and that certain periodicals, and those

perhaps most popular with many members of the Club, have been removed. During the war the organisation of the Clubs' Union and its Constituent Institutions, together with such work as the adequate supply of periodicals in the Reading Room, naturally became stagnant. After the war, however, various secretaries set to work and, after the expenditure of a great deal of time and energy, gradually produced a satisfactory condition of affairs. It is a great pity that, in spite of all this work, there are some who, even in small details, upset much of what has been done. We appeal to these men to realise this point of view and we feel sure that, with a little more forethought, such things as the practice of the removal of periodicals from the Reading Room will cease.

PRACTICAL politics in the Hospital have once more evolved into a struggle between the Tree Party and the Grass or Anti-Tree Party. There has recently been a lull in this all-absorbing topic, but a fresh outburst has now been caused by the demolition of yet another tree in the Park. After many wanderings over and around this "battlefield" we have reluctantly come to the conclusion that it is war to the knife, with no compromise! Many attempts have been made, and up to the present all have been unsuccessful, to improve the grass in the Park. It is now quite clear that the grass and the plane trees will not grow together. Those who want the trees must be prepared to do without grass, and those who want good grass must be prepared to see even more trees demolished. In rainy weather the drip off the leaves, especially in London, probably contains a fair proportion of sulphur compounds, and for other reasons the plane tree is more inimical to the growth of grass than trees such as the chestnut. A point to be also borne in mind by the Tree Party is that the present plane trees are a product of the last thirty years and not an immemorial tradition at Guy's. Further, a few years ago they had not nearly attained their present size, and consequently used not to exert such a bad influence on the grass as they do now. We feel, however, that the presence of some trees is necessary for the beauty of the Hospital, such as it is, and perhaps the ideal solution would be to demolish all the present big trees, thoroughly cultivate the grass all over the Park, and then plant, in definite places, trees similar to the smaller ones now growing in front of the Medical School.

What an opportunity this discussion would give us were the Clubs' Union a more democratic institution, and the officers of the Council elected at a General Meeting! Hecklers would be rife on the subject of the trees in the Park and what should be done with them. We can even imagine an Anti-Tree Party candidate promising, were he elected, to advocate economy of labour by procuring the French firm to pull the trees down!

THE Athletic Club, fresh from their recent victory in the Inter-Hospital Cross Country run, will soon be entering upon an active season in the way of Hospital and University contests. Vague rumours have reached us from Bart.'s to the effect that Stallard is now doing the half mile in two minutes, that Ainsworth Davies is prepared to break all records at sprinting, and that their champion high-jumper can clear nearly six feet without turning a hair! These may be true or not, but it is quite clear that Guy's will have an extremely stiff fight for the Inter-Hospital Athletic Shield, and if we are to win it again it behoves all our athletes to start training seriously in the near future, if not immediately.

No doubt in our travels across London every-day we observe many points on which we should like to have a heart to heart talk with the Directors of London's Underground, but within the confines of Guy's we have been content to leave them outside neither praising nor condemning them. Their latest enterprise, however, is one that intimately concerns all connected with the Hospitals and Colleges in London, and we have no doubt that it will meet with praise from all sides. The L.G.O.C. have now produced a special map showing the positions of all the Hospitals and Colleges in the University, together with the positions of their respective athletic grounds. Appended to the map is a guide showing by what bus routes, railway lines or stations the various institutions and grounds may be reached. A great deal of trouble must have been spent in compiling the map, but it is worthy of the effort and should prove an invaluable help to all students and others throughout London.

Guy's Hospital.

Income and Expenditure for 1922.

In view of the interest which has apparently been taken in an address to the Guy's Hospital Employees' Association on the Hospital finances, reported in the GAZETTE of December 9th, 1922, the following notes on the Hospital Accounts for 1922 are submitted for the information of readers of the GAZETTE.

1. *Financial position of the Hospital in* 1921 *and* 1922.

The year 1922 has seen a great improvement in the finances of the Hospital. In 1921 the total Income of the Hospital was £145,948 9s. 7d. and the total Expenditure £169,028 8s. 3d., leaving a deficit of £23,079 18s. 8d. In 1922 the total Income of the Hospital increased to £157,684 5s. 8d. and the Expenditure decreased to £150,046 5s. 11d., leaving a balance of Income over Expenditure of £7,637 19s. 10d.

That is to say: Income went up nearly twelve thousand pounds and Expenditure went down nineteen thousand pounds, leaving the Hospital thirty-one thousand pounds to the good as compared with the previous year.

2. *Main Sources of Income,* 1921—1922 (*in round figures*)—

	1921 £	1922 £	Increase or Decrease (1922) £
Annual Subscptns	4,578	4,392	—186
Donations	7,948	8,104	+156
King Edward's Hospital Fund ...	12,000	10,000	—2,000
Hosp. Sndy Fnd ...	4,655	4,740	+85
Hosp. Strdy Fnd ...	1,225	1,413	+188
Invested Property ...	64,224	63,788	—436
Receipts on account of services to—			
In-patients—			
(Gen. Wards) ...	6,051	6,033	—18
(Payng Ward) ...	5,757	5,412	—345
Out-patients ...	7,338	7,067	—271
Approved Societies...	98	3,359	+3,261
Legacies	21,259	4,638	—16,621
Voluntary Hospitals Commission ...	...	13,840	+13,840
Hospitals of London Combined Appeal	...	14,070	+14,070

It will be seen that the main sources of ordinary income remain remarkably constant. The grant from the King's Fund was down £2,000, and legacies only amounted to £4,638, being far below the average. In accordance with the regulations of the King's Fund all legacies must be put to Income for the year, and there is no opportunity, therefore, for a Legacy Equalisation Fund or Reserve; this portion of the Hospital Income is, as a consequence, subject to great fluctuations. On the other hand, the Hospital received no less than £28,000 from the Voluntary Hospitals Commission and the Combined Appeal. These two grants are non-recurring, and there will be no such source of Income in 1923. Grants from Approved Societies brought in new money to the extent of £3,200, and this source of income will be dealt with in more detail in the next paragraph.

3. *Grants from Approved Societies.*

In 1921 an agreement was reached between certain of the large approved societies, viz.,

the Prudential, National Amalgamated, Liverpool Victoria, National Deposit, Royal Liver, and the National Insurance Beneficent Society, whereby the societies undertook to allocate from their surplus funds a contribution towards the maintenance of those of their members who were admitted to those hospitals which were parties to the agreement. The grant has been at the rate of £1 per week per patient. Great expectations were raised as to the income which would accrue as the result of this agreement, as it was thought by the Hospitals that the great majority of their patients were insured persons. The results of the first year's experience have been somewhat disappointing, as the income from this source has not been as large as was expected. In this connection the following figures are of interest :—

Statistics with reference to Insured In-patients at Guy's Hospital for the year 1922.

Total number of patients admitted to Hospital, 9,184.

*Patients over 16, 4,891 (53·2 per cent.).

Insured Patients—

(a) In Societies making contributions to Hospitals, 1206 (13·1 per cent.).

(b) In Societies which do not contribute, 1,162 (12·7 per cent.)=25·8 per cent.

Insured Patients actually entitled to Additional Benefits, 834 (9·1 per cent.).

The fact that of the nine thousand odd patients admitted to the Hospital no less than 44 per cent. were children under 16 will probably cause some surprise, as it is not generally recognised how great is the percentage of children in the Hospital.

Of the patients over 16 more than half are not insured, and are probably dependents who are not wage earners, or small owners of businesses, who as employers are not insured. A very small proportion of the patients admitted to Hospital (except in the Paying Ward) have an income limit over £250.

Of the insured persons only just over half are in societies which make contributions to Hospitals, and of the 1,206 who are members of the contributing societies, only 834, or two-thirds, are entitled to additional benefits. The Hospital, therefore, receives contributions from Approved Societies on account of less than 10 per cent. of the In-patients.

Contributions from these sources might be increased in two ways :—

(a) By inducing *all* Approved Societies to contribute to the maintenance of their members while in hospital.

(b) By obtaining an increased capitation grant from those Societies which do contribute.

4. *Expenditure.*

In 1921 the official average cost of living as compared with 1914 was 222. In 1922 it was 181. The cost of living, therefore, dropped 19 per cent. in 1922. The Hospital Expenditure dropped 16 per cent., which is a remarkably close approximation.

Main Items of Expenditure in 1921 *and* 1922 *Compared—*

	1921 £	1922 £	
Maintenance ...	26,074	22,187	—3,887
Surg. and Dispns....	20,422	16,522	—3,900
Domestic ...	29,695	24,424	—5,271
Establishment ...	5,921	5,215	—796
Salaries and Wages	63,836	60,018	—3,818
Miscellaneous ...	3,636	2,912	—724
Administrative ...	5,214	4,797	—417
Rent, Rates & Taxes	8,151	7,137	—1,014

Maintenance—

The principal savings effected were as below

	1921 £	1922 £		
Meat ...	4,180	3,302	—878	21%
Fish & Poultry	2,109	1,658	—451	22%
Milk ...	5,994	4,603	—1,391	23%
Bread & Flour	2,274	1,353	—921	40%

Surgery and Dispensary—

Drugs and Dressings cost £10,573 in 1922 as compared with £13,286 in 1921, a saving of £2,713, or 22 per cent.

This saving was almost entirely due to diminution in cost owing to purchases of large quantities of dressings under favourable circumstances and at bargain prices from Disposals Boards. The consumption remained approximately the same as in the previous year.

Instruments and appliances cost £4,488 in 1922 as compared with £5,536 in 1921, a saving of 19 per cent.

*A small percentage of these patients are over 70, and therefore not insurable. The number in 1922 was roughly 2 per cent.

Domestic—

The main headings under which a saving was effected were as follows—

	1921	1922		
Renewal & Repair of Bedding & Linen ...	£ 3,815	£ 2,747	—1,068	28%
Coal ...	13,859	10,150	—3,709	27%
Electric Current	2,994	2,349	—645	22%

The diminution in the cost of coal is the important item, the saving in this respect being nearly four thousand pounds. Owing to the enlargement of the Hospital premises and the consequent greater demands upon the Central Station, more coal was used, 6,126 tons in 1922 as compared with 5,239 in 1921; on the other hand, the average price per ton of coal in 1921 was 62/11d. compared with 40/6d. in 1922.

The diminution in the cost of coal has resulted in a decrease in the cost of electricity, the cost per unit of electricity in 1922 being only 1·8d., whereas in 1921 it was 2·82d. Hence the lighting of the Hospital and the cost of lifts and laundry machinery diminished in proportion.

Salaries and Wages—

Medical and Nursing Salaries showed practically no change, but "mechanics' wages" (wages in the Works Department) dropped from £18,705 to £14,663, a saving of £4,042, or 22 per cent. This diminution in cost is due to a general drop in wages in all trades as a result of the fall in the cost of living.

Miscellaneous—

The fall in the wages in the printing trade has resulted in the diminished cost of hospital printing—£2,919 in 1921, £2,302 in 1922, a saving of £617, or 22 per cent.

Under the head of Administration there is a small decrease both under the heading of Management and Finance amounting to £417, or 8 per cent.

Cost per Patient in 1922—

The net result of all these economies is that the cost per In-Patient has dropped from £13 15s. 8d. in 1921 to £11 11s. 9d. in 1922, or in other words that the cost per In-Patient per week has gone down from £4 6s. 1·2d. to £3 16s. 0·7d., a saving of 10s. per head per week, or 12 per cent.

5. *Paying Wards—*

It is sometimes urged in the press that there should be more paying wards for the middle classes in the Hospitals, and that the profits arising from the paying wards should pay for the other beds and make the Hospital more or less self-supporting. In this connection it may be of some interest to consider the accounts of Bright Ward.

Bright Ward contains 24 cubicles, to which patients are admitted at a charge of 5 guineas a week. After charging the Ward with all expenses, including maintenance, nursing, heating and lighting, domestic service, and drugs and dressings, but excluding rent, rates, and taxes, the ward shows an average profit for the last three years of £847, the total receipts averaging about £5,600 per annum.

Supposing that instead of 24 paying beds there were 240, the Hospital might expect an additional income of about £55,000 from this source; but from this income payments would have to be made to the Medical and Surgical Staff, as a large proportion of patients of the lower middle class would not be able to pay for operation and treatment fees over and above the charge of five guineas a week; but the number of beds available and now fully occupied by persons who cannot afford even five guineas a week would be reduced by a third, and this would be a serious loss to the necessitous poor in the neighbourhood and the surrounding districts.

It is obvious, therefore, that even with the comparatively large income which Guy's derives from endowments, the Hospital could not be made self-supporting by the income from paying beds at moderate fees, unless a large proportion of the beds were closed to the necessitous poor and converted into private cubicles; and by this action the Hospital would to a great extent forfeit its claim upon the charitable public, who in 1922, by legacies, subscriptions, and donations, and through grants from the Central Funds, supported it to the extent of nearly £85,000.

It is interesting to note from the annual report of St. Luke's Hospital, New York, that the number of free patients and paying patients admitted in the year 1922 was about equal. Guy's Hospital would probably not be self-supporting unless an equal proportion (50 per cent.) of its free beds were converted to paying beds.

H. L. E.

COMPETITION

IN CONNECTION WITH

"HEALTH-FIRST" CAMPAIGN.

DURING a debate in the last Parliament on the subject of our "C3" population, Mr. Frank Briant, member for Lambeth, made some remarks, the main purport of which was as follows :—

At the beginning of the European War, we postered the nation into Patriotism ; at the end of the War, we postered the nation into Thrift ; why should we not now poster the nation into Health ?

There are reasons to believe that an attempt to do so may shortly be carried out, and such a "Health-First" campaign would need as its most essential requirement a number of clear, concise sentences, making an effective appeal to the individual to do, or to avoid doing certain things, with the object of maintaining a high standard of personal health for his own, and consequently, for his country's benefit.

We therefore offer the following prizes for the best sentences sent in, suitable for a "Health-First" Campaign :—

First Prize — £12 plus 1/3 of entrance fees (total limit £20).
Second Prize — £5 „ 1/6 „ „ „ („ „ £10).
Third Prize — £3.

(Surplus Entrance Fees to be paid over as a contribution to the Hospital.)

Any number of sentences may be sent in by the same competitor, but each sentence must be accompanied by an entrance fee of One Shilling.

Competitors are requested to comply with the following regulations :—

1. Each sentence or sentences must be written on a plain sheet of paper, or on the Entrance Form provided, **containing no name or address,** but signed with a **nom de plume.**
2. Each sentence submitted must be accompanied by an entrance fee of One Shilling.
3. Enclosed in each envelope containing competitors entries and entrance fees should be a **sealed** envelope, addressed with the nom de plume of the competitor, and containing within his or her name and address on a separate piece of paper.
4. Entries, as above, should be addressed to the Editor, "Guy's Hospital Gazette." Cuy's Hospital, S.E. 1,, and the envelope should be marked "Competition" in the top left hand corner.
5. No correspondence dealing with the competition should be enclosed in the same envelope as the competitor's entries.
6. The Editor's decision in all matters connected with the Competition shall be final.

This competition is not confined to "Guy's" men and women, and all readers of the Gazette are urged **to make the competition known as widely as possible, and induce their friends to enter.**

All competitors should enter at the earliest opportunity. The closing date will be announced later.

The following gentlemen have very kindly consented to act as judges :—

FRANK BRIANT, Esq., J.P., M.P.
Col. F. E. FREMANTLE, O.B.E., M.P., F.R.C.S.
Dr. LAURISTON E. SHAW, M.D., F.R.C.P.

Of the Prize Money, £10 was donated anonymously and £10 was allotted by the "Gazette" Committee.

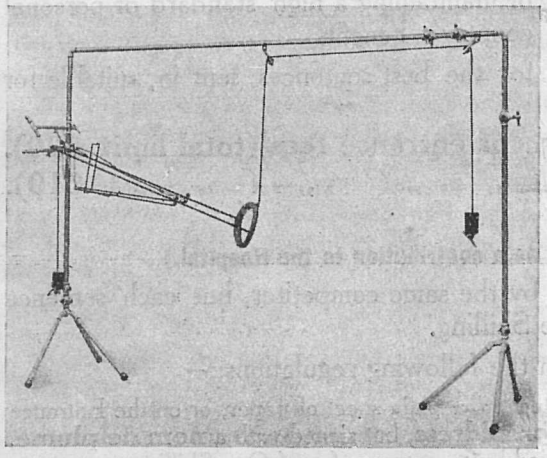
An Entrance Form is inserted with "Gazette." Additional forms and particulars of the Competition may be obtained at the "Gazette" Office, Guy's Hospital, S.E.1.

Specialities.

ROBERT MORISON, Esqre., A.R.San.I., 2, Lauriston Terrace, Edinburgh.

For the mechanical treatment of fractures, the Morison R.I.E. Bedframe used with ordinary beds in General Hospitals, Cottage Hospitals, etc., is a most excellent device, and its utility cannot fail to be readily recognised by every Surgeon.

This appliance is the outcome of suggestions made by Surgeons on the Staff at the Royal Infirmary, Edinburgh, and will be found of the greatest service in the treatment of all fractures and smaller surgical cases where the patient is confined to bed.



The Bedframe can be set in any position relative to the bed, does not require to be fixed to the bed, and when out of use can be easily taken to pieces and packed away in a small space (see advert. p. xi.).

It is already employed in many large Hospitals, and has been described as a boon to Surgeons, an aid to Nurses and a comfort to Patients.

Mr. Morison will be pleased to send full particulars to Medical Men on applications.

ROBT. FERBER, LTD., Carlton Works, Asylum Road, Peckham, S.E.15.

It is now nearly 30 years since Messrs. Robt. Ferber, Itd., established themselves in business for the manufacture of Medicinal Gelatine Capsules, and by using only the finest ingredients and devoting careful attention to their manufactures in every department, the value of their preparations has been deservedly recognised by the Medical Profession.

This business has been extended to Canada, where for many years these Preparations have been largely prescribed. They are attractively packed and are moderate in price.

Messrs. Ferber invite Medical Men to apply direct for samples and particulars.

Pass List.

University of London.

2nd (M.B..B.S.) Examination for Medical Degrees.

MARCH, 1923.

PART II.

L. R. B. Birt.
A. H. Brockbank.
H. N. Collier.
F. R. Dingle.
W. D. Sheldrake.
A. F. H. Stewart.
S. V. Strong.

PART I.

R. C. Brock.
A. Carr.
E. D. Y. Grasby.
M. L. Hutchinson.
A. B. Hyman.
F. J. Mayne.
W. Mayne.
J. W. Schabort.
A. Signaiewsky.
N. H. Skelton-Broune.
J. R. C. Spicer.
W. R. C. Spicer.
S. E. Theis.
S. Trick.
J. G. Weston.
J. M. Turner.

Society of Apothecaries of London.

MARCH, 1923.

Forensic Medicine.

M. Hawke.

Midwifery.

M. Hawke.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The Treatment of Duodenal Ulcer: Operative or Non-operative?

An Address delivered at the Harveian Society on March 22nd, 1923,* by ARTHUR F. HURST, M.D.

As a student I learnt that duodenal ulcer was a rare condition, which gave rise to no characteristic symptom. Except for the fatal hæmorrhage or perforation it might cause, it was regarded as little more than a pathological curiosity, which was somehow connected in my mind with burns rather than with chronic indigestion. I certainly never saw a case diagnosed before 1907. In that year I became interested in Sir Berkeley Moynihan's writings on the subject, and in 1909 I paid my first visit to his Clinic. I learnt from him the characteristic symptoms of the condition, but already then I felt considerable doubt as to whether he was right in advising gastro-enterostomy as the routine treatment in all cases. Though later experience has only confirmed the accuracy of his description of the clinical features of the disease, I am now more than ever convinced that the ordinary treatment of duodenal ulcer should be medical, and that "The Operative Treatment of Duodenal Ulcer" is almost as unfortunate a title for a discussion as "The Medical Treatment of Gastric Carcinoma."

CAN MEDICAL TREATMENT CURE A DUODENAL ULCER?

I should like to remind Sir Berkeley of a patient who consulted him on account of digestive symptoms of 8 years' duration shortly after my visit to Leeds in 1909. He diagnosed duodenal ulcer and told the patient that he ought at once to have a gastro-enterostomy performed, as otherwise he would remain in perpetual danger of hæmorrhage or perforation. The patient asked for some alternative advice, as he did not wish to undergo an operation, at any rate at once. Sir Berkeley suggested as an alternative that he should consult me. This he did, and I wrote to his doctor, Dr. B. H. Stewart, of High Barnet, giving directions as to immediate treatment and treatment for the future in order to prevent a recurrence. A few days ago I heard from him that he had had no digestive symptoms of any importance since the original consultation. "Now at the age of 58," he writes, "I enjoy better health and strength than I have ever known. I am quite free from all pain and do not even have what the layman calls indigestion. My diet is a simple and ordinary one." Fourteen years of excellent health is a satisfactory reply to the question "Can medical treatment cure a duodenal ulcer?"

EFFECT OF GASTRO-ENTEROSTOMY ON DUODENAL ULCERS, AND THE DEVELOPMENT OF JEJUNAL ULCERS.

We have watched with the X-rays a barium meal leave the stomach in at least fifty patients who have had a gastro-enterostomy performed upon them. With hardly an exception the whole meal passed through the stomach direct into the jejunum, even in the complete absence of pyloric obstruction. It is clear, therefore, that the acid chyme, together with any chemical or mechanical irritants present in the food and drink taken by the patient, can no longer pass over the ulcer. The result is that it always, or almost always, heals. The alkaline duodenal contents, which enter the stomach through the stoma, generally suffice to neutralise the gastric contents. But most patients who develop duodenal ulcer have a constitutional hyperchlorhydria, which persists after the ulcer has healed, so that instead of being neutralised as a result of the operation, the gastric contents often remain abnormally acid. This explains why a jejunal or gastro-jejunal ulcer develops after at least 5 and more probably after 10 per cent. of gastro-jejunostomies performed for duodenal ulcer, though much less frequently after its performance for other conditions. Among 50 consecutive private patients, who have been under my care during the past two years for duodenal ulcer or the results of duodenal ulcers, 14, or 28 per cent., had a jejunal ulcer which had followed a gastro-enterostomy performed before I saw them. Though I expect to get complete and permanent relief with efficient medical treatment and after-care in every case of duodenal ulcer, it is a very different question with a jejunal ulcer, and the surgery of the condition is also most unsatisfactory, as shown by the fact that several of my pa-

*Following the opening address by Sir Berkeley Moynihan on "The Treatment of Duodenal Ulcer: Operative and Post-operative."

tients had undergone second or even third operations without relief. The final state in some instances was truly deplorable, and in nearly every case the patients were more ill at the time they consulted me than they had been before the original operation.

Quite apart from the danger of this serious complication, it is not uncommon for minor symptoms, especially intestinal, to develop after a gastro-enterostomy for duodenal ulcer.

Is Gastro-Enterostomy devoid of Danger?

I should now like to ask what really is the mortality of the operation. I know it can be regarded as nil in the hands of the distinguished opener of this discussion, but is that true of the average surgeon who performs the operation? I doubt very much whether the total mortality of gastro-enterostomy for duodenal ulcer in England in 1922 was less than 5 per cent. I have certainly seen death occur as an immediate result in patients, who were in a good state of health and were operated upon by first-class surgeons under the most favourable conditions; in two cases this was due to hæmorrhage, which had not previously occurred.

The Danger of Hæmorrhage & Perforation.

A reason often given for advising surgery is the danger of fatal hæmorrhage or perforation. But personally I have never had a case of fatal hæmorrhage from a duodenal ulcer under my care, and I have only once found it necessary to have an operation performed on account of hæmorrhage: this was done by Sir Berkeley Moynihan with the most satisfactory result, but I may add that I had advised the patient to have a gastro-enterostomy some months earlier, as the chronic duodenal ulcer from which he suffered had led to pyloric obstruction. Dr. J. J. Conybeare has looked up the Guy's records from 1910 to 1917 and finds that there was only one case of fatal hæmorrhage from a duodenal ulcer in the Hospital during those eight years, and that occurred shortly after a gastro-enterostomy.

I have never known perforation occur in a patient who was actually under treatment or who was following accurately our post-ulcer treatment. A considerable proportion of cases of duodenal perforation and of fatal duodenal hæmorrhage occur in individuals, whose previous symptoms have been so short in duration and so mild in degree that not even the most enthusiastic surgeon would have operated had he been consulted a week before the acute event took place. Dr. Conybeare found that during the same eight years nineteen fatal cases of perforation of a duodenal ulcer occurred at Guy's; in only four of the 16, in which the notes were adequate, was there a history of abdominal symptoms of more than a year's duration. Gastro-enterostomy cannot, therefore, be regarded as a necessary prophylactic measure to save the average patient with a chronic duodenal ulcer from severe hæmorrhage or perforation, and I doubt whether the incidence of perforation and fatal hæmorrhage in chronic duodenal ulcer is great enough to balance the danger of severe hæmorrhage or perforation of a jejunal ulcer.

Some surgeons are apparently prepared to operate on every case of duodenal ulcer which comes before them, and I have sometimes been appalled at the casual way in which patients are advised to have a gastro-enterostomy performed without any preliminary attempt at medical treatment. Two doctors consulted me not long ago on account of jejunal ulcers, which had followed the operation and had led to far more serious and prolonged symptoms than those which were caused by the original duodenal ulcers, for which they had undergone no medical treatment of any kind. Fortunately the majority of surgeons take the more reasonable attitude of only operating on cases which have failed to get well with medical treatment. But of what does this medical treatment usually consist? It is very rarely sufficient either in thoroughness or duration; it is still more rarely accompanied by the removal of septic foci or followed by adequate and continuous after-treatment.

Medical Treatment.

I have no time to-night to discuss the details of medical treatment. They are summarised in this chart (*vide* Appendix A); but they require modification to suit each individual case and alteration from time to time as the treatment progresses.

The diet is mechanically and chemically unirritating; it produces as small a secretion of gastric juice and neutralises as much of the acid as possible; it is small in bulk and nu-

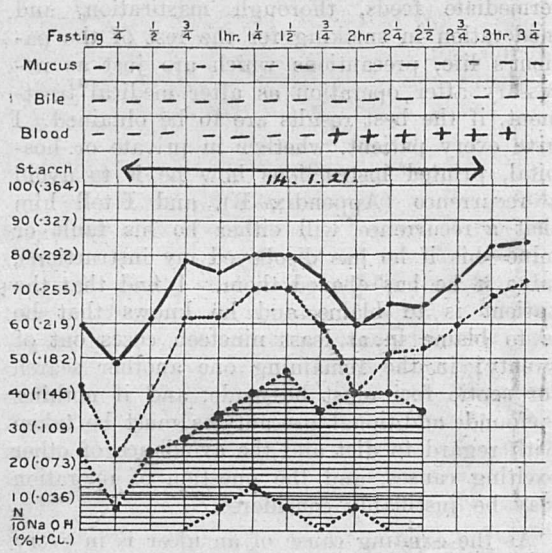
tritious, and contains sufficient vitamines. The olive oil and belladonna inhibit the secretion of gastric juice; the former is also the most concentrated of all foods. The alkalies are given in large doses, as recommended by Sippy, in order to neutralise all the acid secreted, but instead of sodium bicarbonate, which he largely employs, I use only oxide of magnesia, chalk and bismuth carbonate, as these do not stimulate the secretion of gastric juice, whereas sodium bicarbonate is the most powerful stimulant known, and on neutralisation they either give off no gas (like oxide of magnesia) ir give it off so slowly that it all dissolves in the water present, whereas with sodium bicarbonate the stomach becomes distended with carbon dioxide. The early morning dose of bismuth carbonate forms a protective coating for the ulcer, as can be demonstrated with the X-rays, and prevents any free acid from having access to it. The evening atropine or belladonna inhibits nocturnal secretion.

The diagnosis depends on the characteristic pain, the tenderness and rigidity which are found when the pain is present, tenderness and deformity of the duodenal cap visualised with the X-rays after an opaque meal, and the presence of occult blood in the stools. Hypertonus and hyperchlorhydria are evidence of the underlying diathesis, not of duodenal ulcer, as they persist after the ulcer has healed, whether as a result of medical or surgical treatment. It is clear, therefore, that the ulcer cannot be regarded as cured until all spontaneous pain, all tenderness and rigidity, all deformity of the duodenum caused by the spasm or the presence of a crater, but not, of course, that caused by fibrous cicatrisation, and every trace of occult blood in the stools have disappeared. To be on the safe side I advise continuing with the strict treatment in bed until these signs of activity have disappeared for a fortnight; the total duration of strict treatment thus varies between four and six weeks in the majority of cases. The patient then begins to get up and has one week on an intermediate diet. He is then instructed how he is to avoid a recurrence, which will be likely to occur unless all septic foci are removed, and care is taken to avoid all forms of irritation, which may give rise to a duodenal ulcer in an individual predisposed by the presence of the hyperasthenic gastric diathesis, that constitutional and familial condition which manifests itself in hypertonus, hypermotility, hyperchlorhydria and hypersecretion, without which a duodenal ulcer is unlikely to form. This necessitates care in diet, punctuality at meals, the addition of intermediate feeds, thorough mastication, and moderation in smoking for the rest of the patient's life, precautions which are just as necessary after operation as after medical treatment, if the best results are to be obtained. I give every patient, whether in private or hospital, printed instructions how he is to avoid a recurrence (Appendix B), and I tell him that a recurrence will either be his fault or mine—his if he has disobeyed my instructions, mine if he has obeyed them. I find that the patient is to blame and he knows that he is to blame in at least nineteen cases out of twenty; in the remaining one another search for septic foci must be made, and if nothing is found, additional precautions must be taken with regard to diet and the avoidance of other exciting causes, and the question of operation may be justifiably considered.

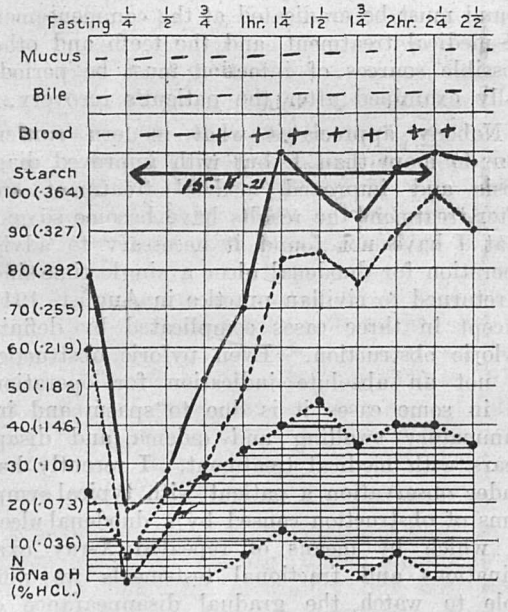
As the exciting cause of an ulcer is in every case a septic focus, a thorough examination of the teeth, tonsils and nasal sinuses must be made and the possibility of chronic appendicitis considered. Every focus of infection which is found must be eradicated at the commencement of medical treatment, and the teeth and other possible sources of infection must be periodically examined after the patient's recovery.

Nobody appreciates what modern surgery can do more than I, but with improved diagnosis and improved medical treatment and after-treatment the results have become so good that I have not found it necessary to advise operation for duodenal ulcer a single time since I returned to civilian practice in August, 1919, except in three cases complicated by definite pyloric obstruction. Even pyloric obstruction is not an absolute indication for operation, as in some cases it is due to spasm and inflammatory swelling and œdema and disappears with medical treatment. I recently had under observation a patient with typical symptoms of obstruction caused by a duodenal ulcer, in which by means of repeated X-ray examinations and fractional test-meals we were able to watch the gradual disappearance of gastric stasis. (Fig. 1.) On the other hand, during the same period I have had to advise

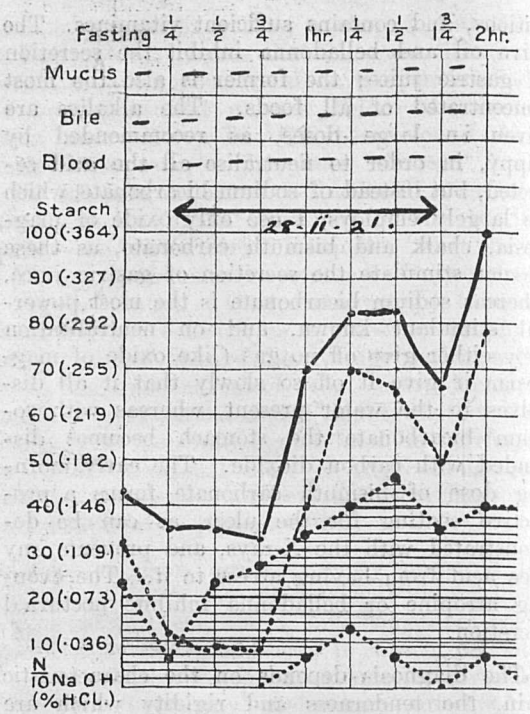
secondary operations in three cases of jejunal ulcer following gastro-entoreostomy performed for duodenal ulcer. One of these is particularly instructive in connection with to-night's discussion. I saw the patient, a man of 32, in July, 1920, with his family doctor, who had



(a) On admission: 3 hours required for evacuation of Stomach.



(b) After 4 weeks' treatment: $2\frac{1}{4}$ hours required for evacuation.



(c) After 6 weeks' treatment: $1\frac{3}{4}$ hours required for evacuation.

FIG. 1.—Fractional hot meals, showing hyperchlorhydria and hypersecretion in a case of duodenal ulcer with partial pyloric obstruction, which disappeared under treatment. (J. J. Conybeare).

advised him to undergo an operation for a duodenal ulcer, symptoms of which had been present for a few months. He had had no proper medical treatment, and no attempt had been made to discover and remove foci of infection; I therefore strongly advised against operation until the latter had been done and medical treatment had been given a fair trial. I warned him against the danger of a jejunal ulcer developing after operation if septic foci were left and if after-treatment was not just as thorough as it would have to be after medical treatment. My advice was not taken, and a gastro-enterostomy was performed a few days later by a very distinguished surgeon, who told me afterwards that he found a definite duodenal ulcer. In the two and a half years which followed, my worst fears were justified; he had more or less continuous pain and repeated severe hæmorrhages, which on several occasions called for transfusion. The removal of septic teeth and medical treatment.

which would have caused the original ulcer to heal without difficulty, proved quite insufficient for his jejunal ulcer. Though he was operated on originally against my advice, I had much difficulty in persuading him to have things put right by a second operation, but at the end of February he at last consented to see Sir Berkeley Moynihan. On March 4th Sir Berkeley excised his jejunal ulcer and detached the gastro-enterostomy; he could find no sign of duodenal ulcer and the pylorus was normal, so now at last after nearly two and a half years of crippling illness, he is in the position he would have been in if he had had the medical treatment I advised at first—safe from recurrence so long as he carefully follows the instructions we have given him.

Treatment of Hæmorrhage.

Uterine hæmorrhage can be arrested by emptying the uterus and causing it to contract. The same principles should be applied to gastric and duodenal hæmorrhage of any severity. A stomach tube is passed just far enough for the end to be a couple of inches beyond the cardia. The stomach is then emptied and washed out with ice-cold water until no more blood appears. When no more water can be evacuated, a drachm of adrenalin chloride (1 in 1000) is introduced, as it may now have a chance of reaching the surface of the ulcer, which it could not have done when the stomach was full of blood. The stomach has now firmly contracted on itself, and the tube is removed. The danger of recurrence of hæmorrhage depends upon the digestion of the clot by gastric juice, the secretion of which is called forth by blood just as it is by any other food. The alkaline powder used in the treatment of an ulcer is therefore given in a small quantity of water every two hours in order to neutralise any acid which may be secreted; bismuth at the same time forms a protective covering over the ulcer. No food should be given till the bleeding has stopped 48 hours. The patient should be kept quite by morphia injections, to which atropine should be added on account of its power of inhibiting the secretion of gastric juice. The patient's blood should be grouped as soon as possible after the hæmorrhage, and arrangements should be made with a suitable donor for transfusion, but with the treatment described this is hardly ever required.

Conclusion.

To sum up. Every case of duodenal ulcer will heal with efficient medical treatment. Recurrence can be prevented by removal of septic foci and the recognition by the patient that he is to follow for the rest of his life certain not very difficult rules as to how, when and what he should eat and how much he should smoke.

If the medical student of the future learns how to diagnose duodenal ulcer in the early stages and how to treat it medically, ten years hence the eloquent address we have heard this evening on its operative and post-operative treatment will, I expect, be little more than historical interest.

Appendix A.

ULCER DIET.

1. Milk 7 oz. every other hour from 8 a.m. to 8 p.m. inclusive. This can sometimes be replaced twice in the day by the same quantity of junket and once by custard.

To each milk feed add Mixture 1.

2. Arrowroot, cream of wheat or Benger, 6 oz., with cream, 1 oz., every other hour from 9 a.m. to 9 p.m. inclusive. Two feeds to have red-currant jelly added, and two to be replaced by potato or artichoke purée.

N.B.—All the above (1 and 2) can be cold or warm, according to taste.

3. Immediately before milk feeds, ½ oz. of olive oil.

4. Immediately before the arrowroot, cream of wheat and Benger feeds, 1 drachm of Mixture 2.

5. Powder 2, to be washed down in 5 oz. of water at 7 a.m., and patient to lie on his right side for 1 hour.

6. Powder 1, half an hour after every feed from 8.30 a.m. to 9.30 p.m. and also at 10 p.m.

7. 10 p.m. Inject subcutaneously from $\frac{1}{50}$ to $\frac{1}{100}$ grain of atropine, or give dr. 2 of Mixture 2.

8. An enema on alternate mornings if the bowels are not naturally opened.

9. Wash the mouth out after each feed, and thoroughly clean the tongue by scraping with a spatula morning and evening.

Note.—During the night the patient should have a feed and Powder 1 by his bedside, so that whenever he wakes, whether in pain or not, he can take a feed followed immediately by a powder. This can be repeated as often as he is awake throughout the night.

Powder 1.—Prepared Chalk, gr. x.
Bismuth Oxycarb., gr. xxx.

Powder 2.—Bismuth Oxycarb., oz. ½.

Mixture 1.—Sod. Citratis, gr. xv.
Emuls. Magnesiæ, ad i—iv. drachms, the dose to vary according to the state of the bowels.

Mixture 2.—Tinct. Bellad., m. v—x.
Aq. ad dr. i.

Any tablets which are taken should be crushed, and no cachets should be used.

Appendix B.

Instructions How to Prevent the Recurrence of Symptoms.

Avoid alcohol, except if desired later on, a small quantity of light wine or diluted whiskey at meals; avoid effervescing drinks.

Avoid all pips or skins of fruit (whether raw, cooked or in jam, and currants, raisins and lemon peel in cake), nuts and all unripe fruit. For example, an orange may be sucked, but not eaten. Currants, raisins and figs are are particularly undesirable.

Avoid all raw vegetables, whether taken alone (celery, watercress) or in pickles or salad; green vegetables must be passed through a sieve and mixed with butter in the form of a purée. Porridge is only allowed if made with the finest oatmeal.

Avoid vinegar, lemon juice, sour fruit; pepper, mustard, curry, chutney, excess of salt; new bread; tough meat, salted fish or meat, pork, made-up dishes, high game; clear or thick meat soup.

Take plenty of butter and cream, and a tablespoonful of olive oil before each meal.

Eat slowly and chew very thoroughly.

Don't smoke excessively. No smoking at all if any indigestion present.

Have some food in the middle of the morning, and on going to bed, and if you wake during the night. (For duodenal, but not gastric, ulcer).

Have your teeth attended to by your dentist regularly every six months.

Take no drugs in tablet form.

If you have the slightest return of symptoms, go to bed for a few days on a milk diet, and do not wait for the symptoms to get serious.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Treatment of Ulcerative Colitis by Anti-dysenteric Serum.

Dear Mr. Editor,—It may interest R. R. M. to hear that the good effect of anti-dysenteric serum in the treatment of the large majority of cases of sporadic ulcerative colitis is specific and not due to the introduction of foreign protein into the blood-stream.

I tried ordinary horse serum in one severe case, increasing the dose injected intravenously up to 100 c.c., but not the slightest improvement occurred. After a few days' interval, anti-dysenteric serum was tried, suitable precautions to prevent anaphylaxis having been taken. The result was most striking: hæmorrhage stopped promptly and the sigmoidoscope showed that the ulceration disappeared in a few days. My experience with this new treatment of ulcerative colitis since I first tried it three years ago has been so satisfactory that I believe that appendicostomy will no longer be required in any cases except the very rare ones in which the serum fails to cure.—Yours faithfully,

ARTHUR F. HURST.

April 3rd, 1923.

Dear Sir,—In your last issue Dr. Gordon Goodhart draws attention to a discrepancy existing between his own experience and a statement recently made by me in a Clinical Lecture to the effect that, if properly looked for, the tubercle bacillus may be found in the cerebro-spinal fluid from "nearly every case" of tuberculous meningitis.

I must plead guilty to a loose manner of speaking, and seek leave to amplify my remarks.

There is certainly no proof of the diagnosis of tuberculous meningitis which is so satisfactory as the discovery of the tubercle bacillus in the fluid obtained by lumber puncture. Experience has led me to believe that this discovery may be made in a high proportion of cases. In the technique which I described there is certainly "no magic." It may be practised without difficulty by any medical student or practitioner. I believe, therefore, that a search for the bacillus carried out in this way is a practical measure, which I would encourage the student to carry out, in the reasonable hope of obtaining the most convincing proof of the nature of a disease whose clinical aspect is sometimes puzzling. An hour spent in searching two or three slides will not have been wasted if it leads to a positive result.

I have been especially impressed by the number of positive findings which I have been privileged to witness in the laboratory of Dr. J. R. Perdran, of Lambeth Infirmary, during the past two years.

This worker, in the course of a recent report published by the Ministry of Health, describes the technique to which I have alluded, and concludes, "A careful search for these organisms will generally prove successful if the case is one of tuberculous meningitis. During the five years that I have used this method I have obtained 85 per cent. of positive results with it, whilst immediate and prolonged

centrifuging has only rarely yielded a positive result."

Dr. Goodhart refers to the figures of Fürbringer, Schwarz and Koplik, which support my view as to the frequency with which the bacillus may be found, but considers the number of cases inadequate. On the other hand Hemenway (quoted by Osler) claims to have obtained a positive result in 135 cases out of a series of 137.

These results are more encouraging than Dr. Goodhart's who mentions 50 per cent. or less of positive results—without, however, stating the number of cases investigated.

There appears still to be a divergence of opinion in the text books of clinical medicine. Of two authoritative works, published in 1922, one discourages the searcher by stating that "sometimes tubercle bacilli may be detected"; the other, more in accordance with my own view, holds that "careful examination will almost always reveal the presence of the tubercle bacillus."

The difference of opinion is one which can be settled only by the careful preparation of statistics from a large number of cases. Meanwhile I am sure that Dr. Goodhart will agree with me that in every case of supposed tuberculous meningitis a prolonged search should be made for the tubercle bacillus in the cerebro-spinal fluid.—I am, Yours faithfully,

C. P. SYMONDS.

74, Wimpole Street.
March 31st, 1923.

Effect of the Nervous System on Lactation.

DEAR SIR,—The following is of interest:—

A young unmarried mother was admitted to the Mothercraft Training Centre, Earl's Court (Dr. Truby King), with her baby, she came in for a failing milk supply and was given the post of housemaid. The child was fed 4 hourly—with no night feeding—the mother was put on the N.Z. routine treatment and the milk yield rose from 7½ oz. to full breast-feeding in a fortnight, in spite of the mother having to busy herself with household duties. A sudden falling off from 24½ oz. to 20 oz., and then to 15 oz. and lower, continued for a fortnight, with a corresponding loss of weight recorded on the baby's weight chart, and caused much concern. It was at first thought that the daily routine test-weighings might be proving irksome so these were temporarily discontinued, but without effect; the breast milk still continued to diminish in quantity and the breast milk had to be complemented with "humanised milk." Eventually the matron discovered that the cook and housemaid had been indulging in a quarrel. She promptly put the records of the breast yield and the child's weight on one of the special charts Dr. King had devised, and brought in the two maids. The chart was telling: the amount of breast milk, shown by red columns, was seen to have mounted from 7½ oz. to 24½ oz., then to commence to drop steadily—the weight, previously satisfactory, becoming irregular and finally failing. also. Matron explained how their personal feelings were damaging the baby, and the cook, an Irish woman and the transgressor (again!) said: "She had never been convicted of damaging a baby before." The feud ended, the milk supply rose rapidly to 25½ oz. and all went well.

The second case occurred in N.Z., on Dr. King's farm. He was conducting extensive investigations on the number and quality of microbes found in milk-tests taken during milking in his model "shed." After much trouble and many experiences, some most amusing, before he had drilled his staff to realise the meaning of surgical cleanliness, the final test was to be made. The cow was groomed, her tail tied back, udders and teats washed, a specially made pail sterilised and the milker's hands cleansed; all was ready—but the cow was "paralysed" with such an elaborate toilet and though the udder was full no milk could be got till she was approached some time later with less elaborate precautions! The supply was what the farm-hands know as "held-up."—Yours truly,

J. B. N. PATERSON.

Stuart Street,
Dunedin.
February 19th, 1923.

Guy's Hospital Biennial Dinner, 1923.

DEAR MR. EDITOR,—It is with pleasure that I write to remind you once again that this is "Biennial" year, and it has been decided to hold the Dinner on Wednesday, October 17th, at the Connaught Roooms.

Mr. Guy Bellingham Smith has kindly consented to be our President, and it is hoped and expected that the gathering, both as regards numbers and cheeriness, will be as successful as those of previous years.

The Committee wish to express their thanks for the assistance which the GAZETTE has always rendered in announcing from time to time the various arrangements made for the organisation of this Dinner,

and they hope that the same courtesy may be extended to them on this occasion.—I remain, Yours sincerely,

ARTHUR W. ORMOND.
Hon. Secretary.

9, Devonshire Place,
Upper Wimpole Street, W.1.
10th April, 1923.

An Appeal.

DEAR SIR,—May we appeal through you and the GAZETTE to all Guy's men, and especially to contemporaries of the late Dr. Koettlitz, for contributions towards the erection of a suitable memorial to him in the church where he lies buried in Cradock, Cape Colony.

Dr. Koettlitz entered Guy's Hospital in 1879 and qualified in 1885. In later life he served in several Arctic and Antarctic Expeditions. He was in the Jackson-Harmsworth Expedition to Franz Joseph Land; he was associated with Lord Lovat and General Baden Powell in the Expedition to Abyssinia; he acted as Senior Surgeon and Scientist in the "Discovery" National Antarctic Expedition 1901—4, under the late Captain Sir Robert Falcon Scott, R.N. After the return of the "Discovery" in 1904, Dr. Koettlitz had to seek work for his living, and took up a practice in South Africa, where he died. His wife died a day or so later, and was buried in the same grave.

The Rev. C. W. Wallace, Rural Dean of Cradock, writes to say that there is no memorial or gravestone. Dr. Koettlitz and his wife lie in the same grave, and the only thing that marks the spot is an earth mound.

It is suggested that a memorial might be erected to him and his wife, possibly a plain white marble cross with a suitable inscription in the graveyard to mark the spot, and a permanent memorial in the Parish Church, of which he was a member.

Captain Royds, R.N., The Admiralty, is collecting subscriptions for this purpose, and has received a letter from Dr. Nansen, of which the following is an extract:—

> "I think it is most regrettable that so little has been done in memory of our friend Dr. Koettlitz, and I am glad you gave me the opportunity to contribute my little share towards his memorial."
>
> "I wish you all possible success in your noble undertaking. Koettlitz was indeed a good man and a fine character, and it is always a pleasure to think of the time when we were on Franz Joseph Land together."

Captain Royds has also received other subscriptions and promises from old friends of Dr. Koettlitz in his various Arctic Expeditions, but a further sum of about £40 is still required to provide even a modest and simple memorial.

We should like, therefore, to appeal to any old Guy's friends of Reginald Koettlitz, and to Guy's men in general, to assist in commemorating the services of a distinguished old Guy's man, who lies buried so far from his native land, without any monument to say who he was and what he did.

Subscriptions from 5s. upwards may be sent to Mr. H. L. Eason, Superintendent's Office, Guy's Hospital, and will be forwarded to Captain Royds to be added to the other sums which have also been collected or promised.—We remain, Sir, Yours faithfully,

HERBERT L. EASON.
JOHN FAWCETT.

Guy's Hospital, S.E.1.
April 7th, 1923.

DEAR SIR,—I feel sure that past, present and future generations of Guy's men and women will be grateful to you if you can exert your influence to stay the ravages of the axemen in the Park.

The plane trees are the most beautiful possession of the Hospital and nothing can make good their removal. Already some of the finest specimens have been felled and there are signs that more still have been doomed. There does not, to the ordinary observer, appear to be any adequate reason for cutting them down; they are certainly not a danger to the buildings or to frequenters of the Park; the little light which they exclude in summer time is amply compensated for by their refreshing verdure; any retarding effect which they may have on the growth of grass could probably be overcome by obtaining expert advice on lawn-planting; and in any case it is an inconvenience which Guy's has tolerated for years and would always, I believe, tolerate rather than be deprived any one of these grand and friendly trees.—I am, Sir, yours faithfully,

J. A. RYLE.

The Warden's House,
Guy's Hospital.

Appointment.

A. M. Zamora, M.Ch. Cantab., F.R.C.S. Eng., to be (1) Surgeon with charge of Out-Patients to the Throat, Nose, and Ear Department, Royal Northern Hospital, Holloway; and (2) Throat, Nose and Ear Surgeon to Eltham and Mottingham Cottage Hospital.

Reviews.

The Urethra and the Urethroscope. By F. C. Doble, M.R.C.S., L.R.C.P. (Messrs. Henry Frowde, Hodder and Stoughton.)

A small practical volume containing descriptions and illustrations of most of the modern urethroscopes. Details are given of the structure and method of use of numerous aero-urethroscopes, with internal or external illumination, also of the various types of posterior urethroscope with lens system and continuous irrigation.

In the chapters on technique the reader will occasionally find it difficult to realise which particular instrument is being discussed, a difficulty which could have been obviated by clearer headings and paragraphs.

Many authorities will differ from the author in his statements that the posterior urethra is lined by squamous epithelium, that urethral papillomata are common and that the normal circular muscle rings disappear on high air distention. The author's method of inserting the urethroscopic tube to its full extent at the commencement of urethroscopy, has the disadvantage of interfering with the urethral conditions which are to be viewed; it is very much better to examine the urethra from the meatus inwards than vice versa, and also renders doubly unnecessary the previous exploration of the urethra with a bougie.

The book will be found very useful to those commencing the study of urethroscopy. The coloured plates and other illustrations are excellent as also are the printing and binding.

Notices.

Junior Guyite Club.

A Dinner of the above Club will be held on May 17th, at the Restaurant Frascati (Alpha Salon), 7.15 for 7.30.

P. N. Randall, Esq., M.B., in the Chair.
Price of Dinner 10s. 6d. (Wine not included).
Members are requested to answer before May 13th.

JAMES A. FRASER,
Hon. Secretary.

Western Lodge, Romford.

The "Nineties" Club.

The Annual Dinner of the "Nineties" Club will take place at Oddenino's Restaurant, Regent Street, W., on Wednesday, 2nd May, 1923, at 7 for 7.30 p.m. Will those intending to be present please communicate at once with one of the following:—

P. F. Henry, 79, King William Street, E.C.4.

E. B. Dowsett, 118, Gloucester Place, Portman Square, W.1.

The End of the Rugger Season.

Depleted almost beyond recognition, a team of Guy's went down to Swansea on Saturday, March 24th, and were beaten by the hefty margin of 36 points to 5; no matter how or why this margin of points was run up against us, the men who journeyed to Wales did all that in them lay; they were not up to the standard of Swansea except in pluck and gameness.

Just a word of the Great Departed and a word of those who will not in all probability again don the famous jersey of Guy's Hospital or tread the slippery turf at Honor Oak Park behind the dashing Doherty and to the cry of "Tally Ho!" or whatever that famous leader shouts. But what a leader; in one person captain of Ireland, Surrey, United Hospitals, and Guy's—what a record! Should we not see him again in full cry with our pack I will at once raise my hat to the greatest leader of forwards Guy's has ever had, and thank our lucky stars that after the Great War such a man was forthcoming to revive, ay, rebuild and surpass even, the former glory of Guy's Rugby XV.'s.

Next comes F. Bekker; no more loyal Guy's man ever played; pluck, endurance and skill; always ready, always willing; and there are not many men have missed so few matches as Bekker these four years. His strength has been such that injuries seem foreign to him, though never man ran such risks; for this most distinguished of Guy's scrum halves was always in the thickest of the fight. It will be difficulft to replace Bekker.

P. K. Albertijn has already sailed; a fine man, this great centre-threequarter; the greatest in England these last seasons. I do not fear contradiction; his knowledge of the game, his build, his pace and his cleverness made him a great player. Why he was not capped we must not again argue. Why was not his

name Smith? With all his gifts, P. K. Albertijn was a sportsman, never put out at defeat, always giving his opponents their due, and never making excuses. I never heard an unkind word from Albertijn. Guy's are grateful for his services and part with him with great regret.

W. H. Taylor is another to whom we must bid farewell. A forward of the best type, captain of Cornwall and reserve many times for England, hard, thorough and strong, no better forward has ever played for us, and it is pleasant to think we may again see the famous "Bill" at Honor Oak Park, but on the side of an opponent. Never mind, it is good to think the game may not altogether lose so able an exponent.

G. Zondagh accompanies Albertijn to the land of his birth. May good luck go with them. A fine forward and useful hooker, Zondagh's value was in the latter capacity; not fast, but powerful, always a hard worker, we were well served indeed by Zondagh. May Guy's never lack such men!

E. L. Sprong—a stand-off of exceptional cleverness; sad he could not play in the Cup Final; some think, but few know, how Sprong has been handicapped by feeling unfit, but his unconquerable spirit has overcome any physical ailment, and again and again has he shown what pluck and determination can do. Given wonderful hands and intuition, seldom missing the ball no matter how it came, Sprong always handed on with precision; no careless passes came from Sprong. An ideal pivot in many ways, and a most elusive runner, his value was indeed great. One hopes his health may greatly improve, and when South Africa claims him once more, their gain will be indeed our loss.

Now for next season. We have some splendid material to rebuild on, and the stalwarts that have gone have but made way for new blood to fill their places. Hope springs eternal, and, what is more, realisation seems bound to follow. Space forbids me to enumerate the promising men of 1923—24. Remember, Guy's Rugger Team is of ancient origin; to get in it is an honour many worthily strive for but few attain. Some songster warbled to me an evening or two ago, "Guy's patients never die." The songster added something about fading away. Guy's Rugger, may I add, will never die, and will you allow me to finish by saying, "Nor will it fade away."

W. K. R.

Sport.

The "Kent-Hughes" Cup Race.

On March 21st, eleven of us went into training, in view of the Inter-Hospitals Cross-Country Race in the afternoon. Chambers and Housden went down to Chislehurst early in the morning and laid a trail over six and a half miles of private land, and the race commenced at 3.30. The trail was thick and clear, so thick and clear in fact that one of the team, who revisited the scene of his triumph the next day to recover a discarded shoe, had words about it with the landowners. He escaped by professing to be a member of the visiting team, the trail having been laid by the home team.

There is little to be said about the race itself. As usual the route was studded with heroic groups of flushed youth, struggling with colic and patriotism. Both the Thomases ran with judgment, but Jago did all he could to discourage the team. At the start Fuller led at a terrific pace and seemed an almost certain winner until Jago panted from the rear, "Steady up, Fuller; you're going too fast," which would naturally break the heart of any enthusiastic runner. At the half distance he also put an end to Housden's activities, by jumping on him, as he was negotiating a barbed-wire fence. However, he ran into third place with a temperature well over 100°, and so is forgiven. Our greatest disappointment was the arrival of F. Marsh too late to race. Deprived of his assistance we still won comfortably, but he, full of remorse at being left out of the victory, returned home and developed chicken-pox.

Result—

1. Guy's, 23 points.
2. K.C.H., 46 points.
3. Bart.'s, 70 points.
4. Middlesex, 71 points.

1. R. C. Lightwood (K.C.H.), 37 mins. 55 secs.
2. J. G. S. Thomas (Guy's), 37 mins. 59 secs.

3. M. E. M. Jago (Guy's).
4. L. G. Housden (Guy's).
5. J. D. S. Thomas (Guy's).
6. D. A. Wilson (Middlesex).
7. J. L. Beazley (Bart.'s).
8. R. H. Yelf (K.C.H.).
9. J. L. Faull (Guy's).
10. J. L. Livingstone (K.C.H.).
11. W. W. Darley (Bart.'s).
12. H. M. Royce-Jones (Middlesex).
13. A. Simpson (K.C.H.).
14. W. R. Chapman (K.C.H.).
—. S. E. Theis (Guy's).
15. J. E. Snow (Bart.'s).
16. J. R. Tree (Middlesex).
17. R. G. West (Bart.'s).
18. R. J. K. Chatty (Middlesex).
19. K. F. Mills (Middlesex).
—. R. S. Chambers (Guy's).
—. L. J. Hyder (K.C.H.).
—. B. Adlington (K.C.H.).
—. G. J. Griffiths (Middlesex).
—. G. M. Housden (Guy's).
—. H. L. Sparrow (K.C.H.)
—. H. J. Fuller (Guy's).
—. G. S. Landon (Guy's).
—. H. Richards (Guy's).
20. O. H. Bellerby (Bart.'s).

Also ran in the reverse direction, F. Marsh (Guy's).

Association Cup Final.

GUY'S v. MIDDLESEX.

The final, which had been postponed on account of bad weather, was played on St. Thomas's ground, at Chiswick, instead of at the Crystal Palace, on March 19th, 1923.

At the beginning of the game Middlesex made one or two spectacular runs, but our backs were very safe and cleared easily. Guy's then made a spirited rush and, following a scramble in front of the goal, Gonsalves shot hard. The goalkeeper stopped the shot, but the ball appeared to roll over the line. It was disallowed however, but in a few minutes Couch scored with a fine shot. This success heartened Guy's tremendously and they played with rare dash. The forwards were playing magnificently and were well backed by the half backs. Couch was leading the line with great judgment. Middlesex broke away and in effecting a clearance, Wooldridge was charged over and the ball was screwed into the net by Jeramiah. Thus, half-time came with the score 1—1.

In the second half, Guy's made repeated raids on the Middlesex goal and soon were rewarded by another goal, the result of an excellent individual effort by Couch. Middlesex now appeared to have lost interest, and although they attacked strongly at times yet they never looked like scoring, so sure and confident was the tackling of our defence. A third goal was notched for Guy's about a quarter of an hour before the end. Pickett, who had been playing extraordinarily well, took the ball well out to the right and then swung in a fast centre which Couch tapped into the goal. Guy's continued to press until the whistle went for time.

The game was a fast and interesting one and Guy's deserve tremendous praise, for they played with a disorganised forward line and a disabled left wing. It is difficult to pick any individual member of the team out for praise, for each man played extraordinarily well, but Couch in the forward line, and Hewetson deserve special mention.

Guy's Team.—Wooldridge; Hancock, Wakeford; Gray, O'Meara, Hewetson; Walters, Pickett, Couch, Gonsalves and Plowright.

Junior Hockey Cup Final.

GUY'S 2nd XI. v. ST. THOMAS' 2nd XI.

The final round of the Inter-Hospital Hockey Challenge Cup (Junior) was played at Elmers End, on Friday, March 23rd. Owing to the recent heavy rains the ground was in a very waterlogged condition and rain continued to fall throughout the whole match.

Guy's started well in the first half, and most of the play was in their opponents half of the field. The ground, however, got cut up very soon and it was impossible to keep the ball on the move, save on the wings where J. Martin and E. B. Curtis worked hard to get the ball up towards the opponents goal. However, whenever the ball got into the centre great trouble was experienced by the inside forwards in shooting. After about 10 minutes play A. Broido scored for Guy's. From the bully off St. Thomas' made a rush, led by their centre forward; they were however prevented from getting into the circle. For the next few minutes play was confined to mid-field. St. Thomas' made another rush, but the ball was cleared to the left wing and J. Martin made a good run right down to the opponents circle where A. Broido again scored. At half-time Guy's held the lead by 2 goals to 0.

At the commencement of the second half St. Thomas' opened briskly. Their centre forward took the ball down time and again to the Guy's circle. Eventually he scored with a good hard shot into the corner of the net. Guy's now began to show signs of tiring. The defence had their work cut out to keep St. Thomas' out of the circle. The forwards, whenever they did get near the opposing goal failed in their shooting. A little later St. Thomas' scored again, thus making the score equal. Play was now mostly confined to the Guy's half and soon St. Thomas' scored a third time. For the last 10 minutes of play Guy's made a desperate effort and were in the opposing circle many times, the condition of the ground, however, making it difficult to shoot. However, they put in one or two shots which the St. Thomas' goalkeeper only just succeeded in stopping. When the whistle went for time St. Thomas' held the lead by 3 goals to 2.

Guy's Team.—A. W. Reynolds; C. G. Bowen, E. T. Conybeare; G. Gathergood, G. R. Ford, D. W. Lloyd; E. B. Curtis, E. C. Smallbone, A. Broido, G. R. Pidgeon, J. Martin.

Fencing.

On Monday evening, the 26th March, the Hospital Epée and Foil teams opposed teams from the Honourable Artillery Company for the fourth time and definitely established wins with both weapons.

In foils, Blacker and Foy won all their contests for the Hospital, Housden losing three fights and Johnson four. Result:—Guy's Hospital 9 victories, H.A.C. 7 victories.

In epée, Blacker scored three victories and one coup double; Foy, Housden and Silvester, three victories and one defeat. Result:—Guy's Hospital 12½ points, H.A.C. 3½ points.

Guy's Team may be congratulated on winning their first dual victory.

Publications Received.

British Medical Journal, St. Bartholomew's Hospital Journal, Bedford College Union Magazine, Middlesex Hospital Journal, Hospital and Health Review, Abstracts of Bacteriology, St. Mary's Hospital Gazette, London Hospital Gazette, Indian Medical Record. New York State Journal of Medicine, Nursing Times, Manchester University Medical School Gazette, Dental Record, The Antiseptic (India), Presa Dentara, The Hospital Gazette, The Caducens (Hong Kong University), Indian Medical Gazette, The Prescriber, Bratislava Medical Journal.

"Right Method in Photography."

"Right Method in Photography" is the latest booklet issued gratis to photographers by Burroughs Wellcome & Co. The title is an apt description of its contents, which embody a delightfully simple and scientifically accurate review of the essentials of successful photography. The publication is of real value to beginner and advanced worker alike, the information being eminently practical and based upon long experience and extensive original researches.

Most photographers to-day realise that development is a chemical reaction, the speed of which depends upon the composition and temperature of the solution and the character of the plate or film employed. Successful work, therefore, is rendered more certain by standardised development, and the time tables compiled by Burroughs Wellcome & Co. form an admirable guide to this end.

"Right Method in Photography" is well illustrated. The cover is a reproduction in photogravure of the Base Camp of the Mount Everest Expedition, 1922, situated on the Rongbuk Glacier at an altitude of 17,000 feet. A photograph of historic interest is reproduced on page 19, which shows the official photographer to the expedition, Capt. Noel, at work outside his dark-room tent.

Photographers should not miss this booklet. It may be obtained post free on application to Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C.1.

Change of Address.

H. G. R. Canning, L.R.C.P., M.R.C.S., L.D.S. Eng., 39, Onslow Square, South Kensington, S.W.7. Tel.: Kensington 7223.

A. H. Douthwaite, M.R.C.P., 73, Southwark Bridge Road, S.E. 1.

K. F. McAlpin, L.D.S., 5, Old Burlington Street, W. 1.

N. S. Heegaard Warner, L.D.S., R.C.S. Eng., 63, Wimpole Street, W. 1.

Papers by Guy's Men.

C. S. Lane Roberts, M.S., F.R.C.S. Acute Puerperal Inversion of the Uterus.—*B.M.J.*, 1923, i., p. 557.

J. M. H. Campbell, M.D., M.R.C.P., G. H. Hunt, M.D., F.R.C.P., and E. P. Poulton, M.D., F.R.C.P. An Examination of the Blood Gases and Respiration in Disease, with Reference to the Cause of Breathlessness and Cyanosis.—*Journal of Pathology and Bacteriology*, 1923, xxvi., p. 234.

C. Worster-Drought, M.A., M.D., M.R.C.P. Parkinsonian Syndrome—mainly unilateral; sequel of Encephalitis Lethargica.—Proc. Roy. Soc. Med., Sec. Dis. of Children, 1923, xvi., p. 32.

Birth.

WEBB.—On April 7th, 1923, at 10, Egerton Road, Bexhill, to Dr. and Mrs. Harold Webb—a son.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 908.] April 28, 1923. [Ninepence.

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Passim.

ON Friday, May 11th, the Guy's Boats meet Bart.'s once again in the Senior and Junior Inter-Hospital Boat Races. This year the senior event, from Hammersmith Bridge to the University Post, has been changed from coxwainless fours to "clinker-built" eights and should prove a much better race. The junior event, however, from the Mile Post to the University Post, remains the same as last year, namely, "clinker" coxed fours. The actual time of the race has been fixed for 2.30 p.m.

Great enthusiasm was shown by Guy's supporters last year, and arrangements are again being made for a steam launch to take followers from London Bridge to Hammersmith, and to follow both the races from there. This, however, is subject to a sufficient number of supporters coming forward as, last year, the United Hospital Boat Club lost money over the transaction. We have no hesitation in calling on all Guy's men to come forward and apply for launch tickets as soon as possible to Mr. A. Tom, the Hon. Sec. of the Boat Club. The value of whole-hearted support in a race such as this is undoubted and does much to spur on the crews.

Arrangements are also being made for the crews to dine at the London Rowing Club after the race and it is hoped that room will be found for as many guests as wish to attend. Further information with regard to this may be obtained from members of the crews or from the Hon. Secretary.

Unfortunately it appears likely that work and House Appointments will preclude three or four of our best oars from the race, but we sincerely hope that they will be able to overcome such minor obstacles for the time being. The Bart.'s crews are already well up to the mark and, in anticipation of a fairly close race, the Guy's men will want all the support they can get both from oarsmen and from supporters in the launch.

The Senior Cup has been won by Guy's since 1921, and the Junior Cup was also won last year when this race was revived for the first time since the war. A great effort will be made to retain both these Cups, and we would urge everyone to turn out and give their support on May 11th.

THE University of London Sports will be held at Stamford Bridge on the afternoon of

Wednesday, May 23rd. A notice regarding this appears elsewhere in this issue, and, as will be seen, an urgent appeal is made for new members to come forward and take a share in the sports. The entries are individual, so that there should be no limit to the desires of any man to participate. In some events particularly there is at present a scarcity of good men in the Hospital, and all who wish to enter are urged to send in their names to the Hon. Sec. of the Athletic Club on or before May 8th. With the assurance of good support in all the events, the Athletic Club should stand a good chance of retaining the Rosebery Cup.

THE Tercentenary of the First Folio of Shakespeare, falling due by the calendar in November next, but kept to coincide with the usual birthday celebrations, was, perhaps, honoured more in Southwark than elsewhere in London. In this district it was that Shakespeare wrote most of the plays of his maturity and here also, though Mr. George Hubbard would have it otherwise, in Park Street, on the site now occupied by Barclay's Brewery, was the old Globe Theatre where many of the plays were first acted.

It is truly fascinating to delve into the history of the Borough in the days gone by and to frame in one's mind the scenes which took place in these streets and inns three hundred years ago! Much of Shakespeare's life in Southwark, together with his association with the Globe Theatre, is detailed in the series of articles, which we print in this issue, by the Rev. T. P. Stevens, Succentor of Southwark Cathedral.

IT is with regret that we announce that Mr. Horace Alfred Hunt, the Curator's Assistant in the Gordon Museum, retires on pension on Monday, April 30th, on attaining the age of 60 years. He has been actively engaged in the Medical School for a period of more than forty years, having commenced service in October, 1882. At that time Dr. Taylor was Dean of the Medical School and Sir James Goodhart was Curator of the Museum.

For seven years Hunt worked in the Post-mortem Room, and in the Museum was, at first, associated with the late Mr. Betts under whom he worked for twenty-five years. For six months he worked in the Museum at the College of Surgeons and, on his return to Guy's, first instituted the method which is now used in sealing the preserved specimens. For twenty years also he was assistant to Sir Thomas Stevenson.

It was as a result of the GAZETTE pathological column that the Clinical Research Association was founded some years ago, and Hunt will be remembered by many old Guy's men in connection with the work carried out by the GAZETTE pathologists. He has always been a man of a retiring nature, and very unobtrusive manner, but has rendered excellent service to the School, and will be remembered by many as one always willing to help.

On Friday, the 27th instant, Mr. Hunt's colleagues in the Medical School presented him with a clock in a light oak case, as a mark of esteem. Attached to the clock was a plate bearing the following inscription: "Presented to Mr. H. A. Hunt by his colleagues of the Guy's Medical School, on his retirement, as a mark of esteem, April, 1923."

IN reference to the Competition announced in our last issue, we have received numerous enquiries as to the form and length of sentences required to be submitted for adjudication. Particulars of the GAZETTE Competition have appeared in the London press and application for entrance forms are being received.

For the guidance of competitors we may say that sentences should be short, not more than two lines at the most, and sharp enough to appeal to the mind of the layman, keeping in view the purpose of a Health First Campaign in "postering" the nation into "health."

The range of subjects which can be covered (*e.g.*, the advocation of pure milk, good food, fresh air, cleanliness, etc., or the deprecation of insanitary living conditions, decayed teeth, smoke, dirt, etc.), is so wide that we do not feel justified in giving the example of one sentence which might tend to confine competitors to that one subject. Each sentence submitted should contain an appeal to the individual to improve his health or that of his children by doing or leaving undone certain things, and should be accompanied by an entrance fee of one shilling.

It is especially desirable that this effort, emanating from Guy's, should be a great success, and we hope that all members of the Staff, old Guy's men, students and nurses, together with their friends, will enter the Competition and give us the benefit of their ideas for a Health First Campaign.

It must be remembered that, after the small amount requisite to complete the Prize Fund has been subscribed, the remainder of the Entrance Fees will be devoted to the Funds of the Hospital.

Any number of Entrance Forms may be obtained from the GAZETTE Office, and particulars are given again on pages xi. and xii. of this issue.

WE would like to draw the attention of "Fall-by-Lysis" to a small notice appearing on this page, and to remind him that Editors are apt to be "extremely annoyed" by anonymity. On receipt of his name, *not necessarily for publication*, we shall be pleased to print his letter and deal with the points he wishes to raise.

IT is just over a hundred and thirty years ago that Jenner delivered, to the Guy's Hospital Physical Society, an address on Vaccination. So interested were the members that they invited him to a second meeting and presented him with a Diploma of Honour. On Thursday evening the Physical Society again turned to a discussion on the merits of vaccination, and we had the pleasure of hearing Mr. Swan, a member of the Anti-Vaccination League, who had come up from Liverpool to address the Society. Prof. Stokes laid before the meeting the arguments in favour of vaccination, together with a series of statistics, the effect of which Mr. Swan naturally tried to reverse. The latter's main attack on vaccination was that the operation is not only unscientific, but empirical, and that the decline in small pox has been due to isolation and improved sanitary conditions. Mr. Weinbren, in an extremely apt speech, refuted this statement, and also brought to view the absurdities in many of the Anti-Vaccination League's pamphlets It seemed to us rather a pity that a layman should have attempted to deal with some purely medical points. One or two of Mr. Swan's assertions, particularly that of the "chancre" in connection with vaccination, were ably refuted by Prof. Stokes in his reply. On the conclusion of an interesting discussion, a unanimous decision was returned in favour of vaccination as an efficient means of combating small pox, and a hearty vote of thanks was given to Mr. Swan and to Prof. Stokes.

Change of Address.

J. A. S. Wright, A.F.C., H.D.D.Edin., L.D.S.Eng., 37, Cavendish Square, W.1.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The Globe Playhouse of Shakespeare.

Shakespeare and Southwark.

By the Rev. T. P. STEVENS, Succentor of Southwark Cathedral.

Author of "The Story of Southwark Cathedral."

As S. George's Day draws near the citizen of Southwark, with fitting civic pride, turns his thoughts to Shakespeare and recalls as far as possible the great days when the dramatist lived on Bankside. This year the matter will attract more than ordinary interest, for it is just three centuries since Henry Condell and John Heming, with great "care and paine," collected and published the plays of Shakespeare, "onely to keep the memory of so worthy a Friend and Fellow alive." These two men had been friends of the dramatist in Shoreditch. They all came together to Bankside in 1599, where they played on the same boards until Stratford on-Avon claimed the greatest of the three. Condell was a comedian; while Heming is said to have been the original Falstaff, combining with his acting the business management of the syndicate which owned "The Globe." So keen was Heming on the business success of the undertaking, that it is recorded of him that he was brought before the Privy Council because he dared to produce plays in Lent. Condell and Heming appear to have had nothing to do with S. Saviour's, and in this they were unlike many other members of the King's Company. They went to the church in the parish in which they lived, S. Mary, Aldermanbury, and both had their children baptised there and both held office. They loved Shakespeare, and it would appear that he loved them, for he left them both £1—6—8 "to buy them ringes."

"Henry V." on site of Globe Playhouse. Performed by Oxford and Bermondsey Club. *Daily Chronicle.*

* * *

Under what conditions did these men play?

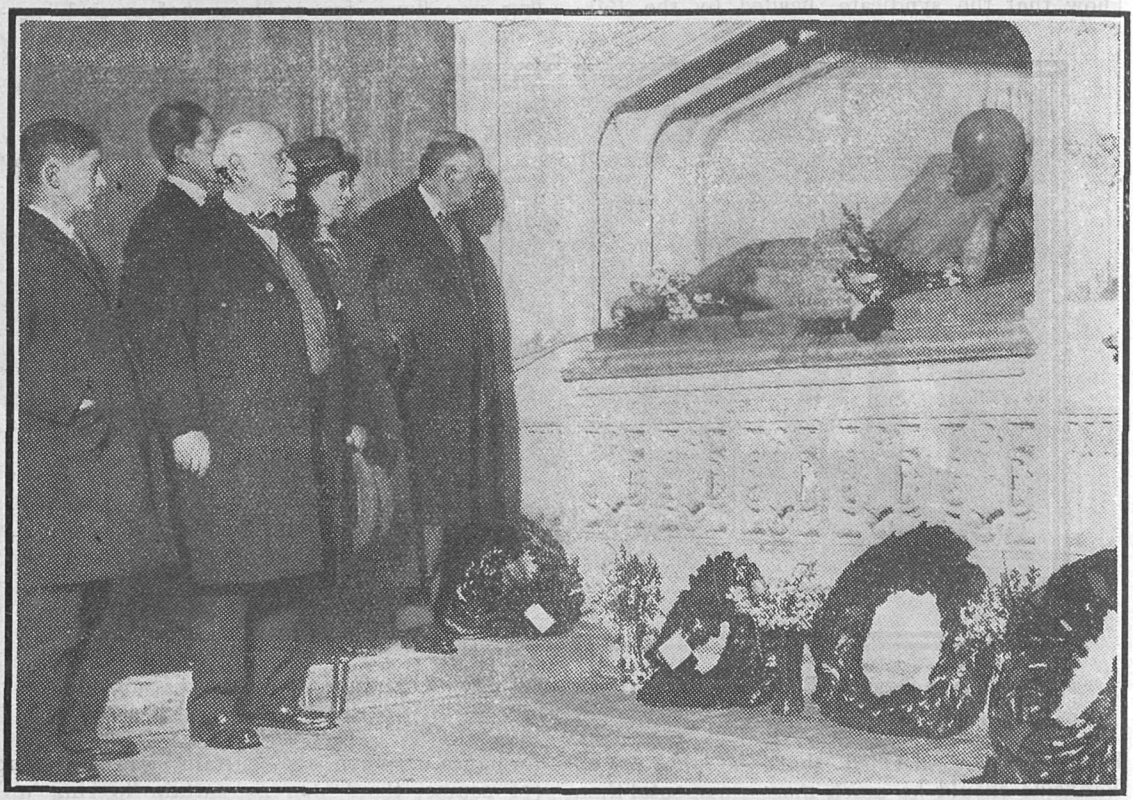
Let us do our best to reconstruct what happened in the "Globe." To begin with the playhouse was almost certainly a building of considerable size. Henslowe's "Little Rose" held more than six hundred people and probably the "Globe" held a thousand. It was a public theatre, in contradistinction to the private theatres, which were roofed in and more expensive than such houses as the "Rose" and the "Globe." The "Globe" was certainly an ornate theatre. The old playhouse in Shoreditch had been called "the gorgeous playing place erected in the fields," and we know that the syndicate, headed by the Burbage Brothers, decided that the theatre on Bankside should be much more ornamental than its predecessors. Even in the first theatres wood was painted so as to represent marble, and the work was done so well that it was calculated to deceive "even the most cunning." In other words the "Globe" was ahead of the earlier houses. They had stages which were removable in order that bear-baiting and cock-fighting might be enjoyed in "the pit," or, as it was known then, "the cockpit." The stage in the new theatre was a fixture and sports were never allowed within its walls. The groundlings stood round the boards, but probably never sat upon them, for there is reason to believe that a low balustrade protected it on three sides. The "shows" took place in the afternoon in summer and winter. In the summer they began at 3 p.m. and at other times an hour earlier, for the law said that "no playing be in the dark so that the auditory may return home before sunset." A slight projection partly protected the stage from the rain, but generally speaking the whole building was open to the weather. There was no proscenium arch to the stage and no scenery until late in the seventeenth century. High above the stage was a turret, from which a flag was flown for an hour before each performance. When the curtain was rung up (of course, there was no curtain to ring up) a trumpeter sounded his instrument three times. During the play this gentleman remained in his high position and made necessary noises, sometimes imitating thunder.

Shakespeare Service.—Robert Atkins, the Mayor of Southwark, Dr. Durmer, and the Chaplain of Guy's Hospital on the way to the site of the Globe Playhouse. *London Pictorial.*

Round the pit, into which the stage projected, were three galleries for those who wished for protection from rough weather, and had no wish to associate with the groundlings. No part of the playhouse was furnished, but stools and cushions could be hired. In the lower-most gallery, Professor W. J. Lawrence tells us, there was a "gentleman's room," or "twelvepenny room," for the well-to-do.

There were two doors; one for the actors and the nobility and the other for the ordinary folk. At the "Globe" people paid one penny to enter the theatre, another on entry to the "scaffold," and a third penny if they wanted some special degree of comfort. Prices were doubled on Sundays and for first performances. As to-day, so in Elizabethan times, most people arrived at the playhouse in good time. Young men would hurry into the pit and look up into the galleries for the ladies of their choice. They would then pay the extra charge to join over from London proper to London improper by ferry, much to the satisfaction of the boatmen. Notices of the plays were posted in the City, but there was no absolute certainty that a particular play would be performed. The weather might make a play impossible, or unruly groundlings might demand a play which was not on the bill.

Things were a little more certain shortly before the performance, when the manager wrote the name of the play on a board, which he stood on the stage facing the audience.



Shakespeare Memorial, Southwark Cathedral. *Daily Graphic.*

their female friends. This was a custom unique to England; nothing of the kind is said to have happened on the Continent until the middle of the seventeenth century.

While waiting for the performance, members of the audience consumed food and drink, which they bought in the theatre from vendors, who also carried tobacco and pamphlets on their trays. The more vigorous spirits played cards. At this period no music was played before the performance. Patrons generally came

People who had already seen the production, or had some prejudice against it, could then have their money back. Such a custom seems to have prevailed for almost a hundred years later, for playbills exhibited the words "No money to be returned after the curtain is drawn."

No programmes could be provided at first, for it was not known sometimes what the play was to be until the last moment. The actors were sometimes at the mercy of their audiences,

which, it must be admitted, were often composed of the more unruly spirits. The players had to hold their own and to work hard. It has been said so often that notices were posted on the stage to indicate a barn or a fortress, but doubt has been thrown on this. It is thought that "locality boards" were sometimes used when the scenes moved rapidly from country to country. This was specially necessary because waits between scenes were curtailed extraordinarily because of the time restriction under which the players laboured.

Such, then, was the theatre in the days of Shakespeare and his player friends. Conventional people tended to despise them, but Elizabeth and James were their friends. The acting fraternity rendered magnificent service to English literature, and they ennobled Southwark, making it the most noble centre of art and letters that this country has ever known.

Heard on the Wireless.

Shakespeare the Londoner.

Lecture by the Rev. T. P. STEVENS, Succentor of Southwark Cathedral.

In the Middle Ages the drama had two homes—the church and the inn-yard. At the Reformation stage plays were abandoned by the Church in England, but they continued in the courtyards of inns. Troups of wandering actors toured the country in the sixteenth century and set up their stages by the kind permission of the inn-keeper and often dressed in his stable. The poorer people gathered round the boards and were known as groundlings, while the better off looked down from the galleries of the house. After a time certain hosteiries in London became specially identified with the drama.

The Puritan element was hostile to the stage, and all who were connected with it. The plays were condemned because of their "ungodliness, lewdness, profanity and enormities," and the actor was sometimes called "the catterpiller of society." Audiences were made up of "vagrant persons, masterless men that hang about the city, theeves, horse-stealers, cony-catching persons, practisers of treason and such other like." The Court of Common Council of the City of London were face to face with a great difficulty. The Puritans were the sworn enemies of the plays and players, while Queen Elizabeth and her courtiers were enthusiastic in their support. The City authorities, being good Englishmen, were able to enter into a compromise, and they decided *not* to suppress the drama but to insist on censoring plays, licensing inns and forbidding performances during church services.

The dramatic fraternity naturally resented the restrictions, and the more enterprising looked out for a home for the drama somewhere beyond the jurisdiction of the civic authority. Two places suggested themselves: Finsbury Fields and Bankside, Southwark. Bankside was, at that time, a place of ill-repute, so James Burbage, the builder of the first English playhouse, turned his thoughts to Finsbury. He leased a piece of ground from Gyles Alleyn for a period of 21 years and began to erect the building known as The Theatre in 1576.

About nine years after the establishment of The Theatre, William Shakespeare, a man of 22, arrived in London. He made for Finsbury and played at Burbage's playhouse, and at another theatre close by called "The Curtain." From time to time he left this district and played at Newington Butts and at Henslow's Rose Theatre on Bankside, Southwark. His appearance at the Rose with Ned Alleyn coincided with the production of his first play in 1592. Then he returned to Finsbury.

Burbage and his landlord were always at loggerheads. Eventually the lease ran out and Gyles Alleyn imagined that the property would fall to him, but he was a foolish fellow: he went away for a Christmas holiday in 1598. While he was away Richard and Cuthbert Burbage, the sons of the first theatre builder, entered into a conspiracy. They called two meetings. One was a meeting of proletarians and the other a meeting of capitalists. The proletarians agreed to pull down the timbers of The Theatre and to carry them to Bankside, and the capitalists agreed to become shareholders in the new theatre to be built in Southwark, and to be known as "The Globe." The five actor-shareholders were Augustine Phillips, William Kempe, Thomas Pope, John Hemmings (joint editor of Shakespeare's plays in 1623), and William Shakespeare.

The Globe Theatre was built and opened in 1599, and for twelve years Shakespeare played in it, lived beside it and wrote for it. At this time he abandoned the historical drama and wrote

"Much ado,"
"As you like it,"
"Twelfth Night,"
"Hamlet,"
"Julius Cæsar."

Some of these are regarded by the authorities as the plays of his maturity. Tradition says that in his leisure time he would ferry over the river and spend his evenings with the light-hearted brotherhood at the Mermaid in Bread Street—an inn which unfortunately no longer exists.

When James I. made a formal entry to London in 1604, Shakespeare and eight other actors walked in front of the King from the Tower to Westminster. Formerly Shakespeare had been known as one of the Lord Chamberlain's men; now the group became known as the King's Men, coming as it did under the patronage of the sovereign. Three years later the bard's brother Edmond, a young actor, died on Bankside and was buried in St. Saviour's Church, Southwark. It cannot be proved that the elder brother attended the funeral in 1607, but it is hardly likely that he stayed away, since he was resident on the Bank.

At this period Shakespeare and his friends occasionally left Southwark and gave single performances in Richmond, Whitehall, Middle Temple Hall and Greenwich for the pleasure of Elizabeth or James I. But The Globe was the real home of Shakespeare, Richard Burbage, Condell and Hemmings. From our point of view it was a very simple place. The groundlings stood round the boards in the sunshine on summer afternoons and in the rain in winter. There was no stage curtain, no artificial light, no scenery and no women players. Three galleries provided shelter for the well-to-do folk from the City. Before performances, food and drink were sold and tobacco and pamphlets were handed round. The groundlings were sometimes riotous and sometimes demanded a play that was not in the bill.

After twelve years Shakespeare decided to return to Stratford, but he never lost touch with his London friends. Soon after his retirement, during a performance of Henry VIII., the Globe caught fire; some sparks from a cannon had found a resting place in a gallery thatch. Very soon the whole place was burned to the ground. Only one man was hurt. He was an actor wearing the full pantaloons of the period. They caught fire. Fortunately a brother actor was standing close by and holding a bottle of beer. The beverage came in useful, for he poured it over the flaming garments of his friend.

Somebody here has just said "What a waste!"

In closing may I say that many of us feel that Shakespeare belongs to London? He lived there, played there, made his name there; there he wrote his plays and gained his inspiration. Yet his bones rest in Stratford, which merely gave him birth.

Some day, when the spirit of generosity is abroad, the citizens of that town upon the Avon will send his ashes as a present to the citizens of London, where they will be buried beside the remains of his brother in the church of the parish in which he achieved immortal fame—the parish of St. Saviour, Southwark.

In Southwark Cathedral.

A Midnight Reverie. Shakespeare Speaks.

By the Rev. T. P. Stevens, Succentor of the Southwark Cathedral.

Let it be confessed that from time to time when the lights are extinguished and the doors closed, I steal into the Cathedral. If it were not for the murmur of the traffic and the occasional passing of a train it would be easy to imagine oneself in some old abbey church far from the haunts of men. Sometimes the noise seems to stop and then it is easy to dream oneself back into the Middle Ages and see the monks pass in double file through the old Norman door at the west end and march slowly into the choir.

On a moonlight night which coincided with the Cathedral's birthday, I entered the church alone. Passing down the south aisle I looked at the Shakespeare tomb. No artificial light was necessary for me to see that the meditating figure had gone. I examined the memorial and could detect no marks of violence. A little disturbed, I crossed the nave to the vestry door, which stood open. The electric light did not respond as I applied the switch and I passed quietly into the vestry. Then I caught sight of a glimmer of light in a room beyond. On tip-toe I made my way towards it and then the strangest sight I ever saw met my gaze. On a table six candles burned and in their light I saw that provision had been made for a simple meal. Goblets were placed here and there upon the board and in the centre a tall flagon stood beside a large pewter cup. These things paled into nothingness after a few moments, for stranger things came into view—a group of men passed in silence into the chamber. They took their places round the table—an emaciated figure clothed in a sheet, a tall man dressed as a Crusader, a man wearing a long robe and a chain of S.S. round his neck. Beside him stood one who was undoubtedly the immortal Will wearing the ruff and costume of Elizabethan days. Then close at hand was a Bishop, with the badge of the Order of the Garter embroidered on his robe, and beside him was the figure of a bewigged fellow with a guilty look on his face and the habit of a man of Caroline times. They stood in silence for a moment and then the

Bishop reminded the company that one must preside at the feast. "John Overy," said the Crusader. "He was here before us all." All agreed and the wizened figure took the head of the table. He looked towards the Bishop, who raised his hand and said: "God bless these gifts and you my brothers," and strange voices said "Amen." Then all sat in silence for some twenty minutes and the meal proceeded. The president then rose and filled the pewter cup. What followed I can only describe in my own poor language. Memory does not serve to reproduce the words spoken by those great Englishmen of other days. John Overy stood up, the loving cup in hand and addressed his companions. This is the purport of his speech: "I am a proud man this night. Before you my brothers were born, I was a citizen of this place. As I look back I recall my faults, my love of money and my mean-spirited way of life But my evil turned to good and my daughter Mary, to whose soul may God give peace, gave my hoarded gold for the founding of a church, which took her name. That church perished, not once, nor twice, but whenever it perished faithful men built it anew and to-day it is one of the glories of the land and is of cathedral dignity. I raise this loving cup and drink and wish it well and the blessing of the great God."

The cup passed to the Crusader, who stood to attention. "I too am proud," he said, "for I saw men place stone on stone until the choir which men know to-day and chapel of Our Lady stood in lonely majesty dominating a score of little homes. To the good Canons of S. Augustine I gave of my means and when his Lordship of Winchester sang the first Mass, in the year 1220 of our Lord, I stood beside the altar and received at his hands the Body of the Lord. And to the font I led men of savage nature that they might become the sons of peace. At the end of my days this noble fane remained unfinished; it remained for other men to do what we did leave undone. To one of these I pass this cup in gratitude."

John Gower faltered as he stood, for from his eyes the light had gone before he passed into the realms of sunshine. "I do not deserve those words of praise," he said, "for I did naught but place a new roof on that transept which tended towards the north. It was my good fortune, five centuries ago, to have a little house on the place where I now stand and a chapel in which I did wed Agnes Groundolf. It was my joy day by day to assist when the monks did sing the praises of their Maker in the choir of pointed arches which remains to men of to-day. If I gave of my store of wealth I deserve no praise, for joy it was to see this shrine of holiness stand firm when all else spoke of change and decay. I did some slight service to this house of God; now I hand this cup of wine to one who adorned the annals of this parish and the name of England. As a humble man of letters, I count it joy to pass it on to one whose name will ring through the world when men know me no more. William, I charge you—let us hear that voice which men loved in the days of the Lady Elizabeth."

Shakespeare stood nervously, as many an actor does when called upon to speak his own spontaneous words. "I have no rightful place in your company this night," he said. "Three centuries ago I lived here and often-times I played hard by, first in the Rose and then in the Globe. Churchmen loved us not, for we served God and men in ways which were not theirs. Perhaps we wronged the Church by drawing men away when prayer was offered in this holy place. And perhaps Churchmen wronged themselves and us by thinking that there is only one way of worship. In our unroofed churches we spoke great English, told amazing tales. We depicted life as men had lived it upon many shores. We held up courage, valour, faithfulness, as the attributes of godliness and we spurned fear and meanness as the devil's own. Oftentimes I walked beneath these hallowed arches and once at least, in tears, I stood beside my brother's grave. He rests here now, while I rest further north. God bless this place and all who've done it service. It is my privilege to make way for a saintly churchman whose liberal soul I cherished then as now."

Bishop Lancelot Andrewes spoke of the troublous times in which he lived, of the unsettlement of Church and State in the days of Elizabeth and James and of the fierce passions which swayed the minds of men. For many years, he said, it was his privilege to live under the shadow of S. Saviour's tower and to worship within its walls. He counted it a joy that it should have been thought seemly to bury him within the church he loved.

The Bishop had the strange dignity which we expect from the scholar and some of that playfulness which we associate with the saint. I wondered with what gesture he would hand the cup to Lockier, the pill-maker of the reign of the second Charles. Time heals wounds and makes for understanding and the Bishop treated the bewigged figure with that courtesy which in a gentleman is never lacking.

Lyonell Lockier rose awkwardly, but soon found his ease. "It was comforting," he said, "to note the diffidence of John Overy and Will Shakespeare. I am less worthy than they. John saved his money, honestly gotten, and with it his daughter built a church for holy women. Shakespeare gave the world things of priceless worth and things which will never grow old. He gave to Bankside an honourable name. I did nothing noble. I told men a shameful story of things I made and they believed me. And I made money while they grew poorer. I gained what to me seemed to be the whole world, but I lost my own soul. By the grace of God men buried me in this house of God and through all the years I have been trying to find that which I did lose. Long have I seen my folly. Brothers pray for me and all who rest within this place."

He raised the cup, drank from it and placed it on the table. As he sat down I thought I saw tears streaming down his face.

Overy stood now and said: "Dr. Andrewes will bless us." Five men, separated sometimes by a thousand years, knelt while the Bishop passed from one to the other. Then they filed out and I left my hiding place.

Ten minutes later I crossed the church again and caught a glimpse of the meditating figure of the bard whose words it had been my privilege to hear. He was back in his place, his head resting on his hand, with the model of the Globe at his feet.

Nursing News.

State Registration.

(Nurses' Registration Act, 1919).

The attention of all Nurses who completed their training, or training and experience, before 1st November, 1919, is called to the important fact that they must apply for registration before 14th July, 1923.

They are known as "Existing Nurses."

Members of the College of Nursing should apply for a Schedule for State Registration to:—The Registrar, College of Nursing, Ltd., 7, Henrietta St., Cavendish Sq., W.1.

Nurses who are *not* College Members should apply for "The Second Schedule" FormI(a), to:—The Registrar, The General Nursing Council for England and Wales, 12, York Gate, Regent's Park, N.W.1.

Apart from personal benefit it is most certainly the duty of all existing nurses, whether actively nursing or not, to look upon Registration as a means of bringing legalised order into the Profession and as their personal contribution towards the building up of a Register which will in due time represent the fully trained Nursing Service of the State.

F. A. S.

Papers by Guy's Men.

Sir William Hale-White, K.B.E., M.D. Edward Jenner.—Proc. Roy. Soc. Med., xvi., 1923., Jenner Centenary, p. 1.

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Professor T. M. Lowry, F.R.S. Pasteur as Chemist.—*Ibid.*, p. 16.

H. C. Cameron, M.D., C. P. Symonds, M.D., C. Worster-Drought and Others. Exhibition of Cases showing the late results of Encephalitis Lethargica, followed by discussion.—*Ibid.*, Section for the Study of Disease in Children, pp. 30, 32 and 38.

C. P. Symonds, M.D. (1) Case of Unilateral Affection of Cranial Nerves 7, 9, 10, 11 and 12. (2) Case of Unilateral Affection of Cranial Nerves 9—12 (Tapia's Syndrome) associated with Chronic Otitis Media.—*Ibid.*, Sec. of Neurology, pp. 52, 53.

Alan H. Todd, M.S., F.R.C.S. Surgery in Rheumatoid Arthritis.—*Clinical Journal*, 1923, p. 169.

H. C. Malleson, M.R.C.S., L.R.C.P., L.D.S. A Case of Impacted Lower Third Molar causing Absorption of the Root of the Second Molar.—*Brit. Dent. Journ.*, xliv., 1923, p. 395.

W. H. Bowen, M.S., F.R.C.S. The Mayo and Crile Clinics; With Special Reference to Thyroid Surgery.—*B.J.S.*, Vol. x., 1922—3, p. 359.

C. S. Lane Roberts, M.S., F.R.C.S. Some Considerations of the Sacro-Iliac Joint.—*Lancet*, 1923. i., p. 787.

Obstructive Jaundice.

CLINICAL LECTURE BY R. P. ROWLANDS, F.R.C.S.

GENTLEMEN,—I have chosen this subject for my lecture because the following cases of jaundice, of which I append brief notes, have lately come under my care in Hospital and elsewhere and have given me considerable trouble in diagnosis and treatment.

Case 1.—*Carcinoma of the Common Bile Duct.*—Mrs. E. K., aged 57. In December, 1921, the patient had an attack of vomiting which lasted five hours. In April, 1922, she suffered from abdominal pain, nausea, faintness and wasting. She was jaundiced, but this passed after a month. In September the pain and jaundice recurred, and when admitted to hospital the latter was deep. The gall-bladder was palpable and there was remittent fever. A diagnosis was made of gall-stones in the common bile duct. At the operation (19th September, 1922) no gall-stones were found. A probe passed with difficulty into the duodenum and there was a hard swelling in the lower part of the common bile duct. ? carcinoma. Cholecyst-gastrostomy was performed. The jaundice gradually vanished before the patient recovered, and she went home a fortnight later, but, as you see, she is still thin and sallow. She has lost 4 stone in weight during the last year and now weighs only 8 stone.

Case 2.—*Chronic Pancreatitis.*—Mrs. de la C., aged 30. In the early part of 1922, while in the West Indies, the patient had an attack of fever lasting three weeks; said to have been influenza. Since then she has had three or four attacks of colic, with jaundice, for which morphia had to be injected. She was admitted to Mary, under Dr. Hurst, on the 30th October, 1922. All examinations as regards abdominal disease were negative. Blood examination for bile was also negative. A diagnosis of gall-stones was made and an operation was advised. At the time of the operation (6th Nov., 1922) the patient was not jaundiced and the gall-bladder was not palpable. A hard mass was found at the head of the pancreas, the size of a walnut. There was another hardish mass in the body of the pancreas. No stone could be felt. Several calcified glands in the mesentery of the ileum and the ileo-cæcal junction. Appendix normal. Cholecyst-gastrostomy performed. A diagnosis was made of chronic pancreatitis, possibly due to gall-stones which had passed before the operation. As you see, she looks very well now and has put on over a stone in weight.

Case 3.—*Chronic Pancreatitis: Rupture of Gall-Bladder: Death.*—Mr. J. H., aged 64, was admitted under my care for jaundice of four weeks duration. The gall-bladder was not palpable. Diastase index was 70 (normal 10—40). While straining, two days before admission, patient was seized with violent abdominal pain, and collapsed. Since then the abdomen has become more and more distended. The jaundice was very deep. A diagnosis of pancreatitis or carcinoma of the head of the pancreas was made. At the operation (26th March, 1923) there was peritonitis, with a very large collection of bile and lymph in the abdomen. There was a large perforation of the under surface of the neck of the gall-bladder, which was empty, thick-walled and constricted. The whole of the pancreas was hard and firm. It was thought that the condition was malignant. The abdomen was drained by two tubes; one passed through a stab wound in the right flank to the neck of the gall-bladder and the other in the middle line above the pubis. However, the patient became comatose and died a week later. Chronic pancreatitis was found at autopsy, so that an earlier operation would have saved him.

Case 4.—*Carcinoma of the Head of the Pancreas.*—Miss A. P., aged 67, had had several attacks of pain, in the right hypochondrium, in September, 1922. Jaundice followed, but subsided again until November 1st, when I saw her. There had been no recurrence of the colic. A diagnosis was made of obstruction of the common bile duct by stone, but at the operation (2nd November, 1922) carcinoma of the head of the pancreas was found. The gall-bladder was distended with muco-pus and there were many small, secondary nodules of carcinoma throughout the peritoneum, especially in the pelvis. Cholecyst-gastrostomy was performed and the patient relieved.

Case 5.—*Impacted Gall-Stone and Chronic Pancreatitis.*—Mrs. E. C., aged 43, fat, had had repeated attacks of jaundice and violent colic. She was only a little jaundiced at the time of the operation (26th March, 1923).

The gall-bladder was found to be shrivelled and imbedded in omental adhesions. The pancreas was hard and enlarged throughout. The head was so hard that it was difficult to be sure whether there was a stone or not. The adhesions were separated. There were no stones in the gall-bladder, but one small stone was felt in the lower end of the common bile duct. All the bile ducts were greatly shortened and fibrous, and the duodenum was very adherent to the under surface of the liver. The common duct was opened, just above the duodenum, and a large probe passed down quite easily into the duodenum, but, in passing, it grated against a stone. With considerable difficulty, with the aid of a scoop, this stone was withdrawn. It was as large as a pea, not facetted, globular, yellow and cholestrin. It had clearly been impacted at the duodenal papilla for a long time and caused ulceration of the duct into the duodenum. Hence the slightness of the jaundice. It was not thought wise to remove the gall-bladder.

As you see, the patient looks very well now, three weeks after the operation. She has been home for some days, but has kindly come to show herself.

Case 6.—*Carcinoma of the Pancreas.*—Mrs. C., aged 51. The patient complained of feeling very unwell during 1922 previous to November. In this month she had an attack of jaundice which lasted for some weeks. There was no pain. I saw her in February, 1923. The urine showed bile and 100 units diastase. There had been occult blood found in the stools in January and very severe metrorrhagia There was a large elastic swelling in the region of the gall-bladder. An operation was advised and carried out immediately. The gall-bladder and the common bile duct were found to be distended, but there was no evidence of stone. The head and neck of the pancreas were considerably enlarged and firm but there was no definite proof of malignancy. Cholecyst-gastrostomy was performed for the relief of the jaundice. Diagnosis: ? chronic pancreatitis ? carcinoma of the head of the pancreas. Several hæmorrhages, intestinal and uterine, occurred after the operation and she died at home about 8 weeks later.

I shall confine my attention to the surgical aspects of jaundice due to obstruction of the large bile ducts.

Anatomy of the Ducts.—You may remember that the right and left hepatic ducts are about $\frac{3}{4}$in. long and terminate in the common hepatic duct which is $1\frac{1}{2}$ inches long. The cystic duct is the same length, but the common bile duct measures 3 inches. The latter lies at first above the duodenum, in front of the hepatic artery and portal vein, near the free edge of the foramen of Winslow. This is by far the most accessible part. Below this it lies behind the first part of the duodenum and then, either in or behind the head of the pancreas, where the latter lies in contact with the inner border of the second part of the duodenum. In the presence of obstruction this part is often funnel-shaped and stones commonly lodge here. The next portion is the ampulla which lies partly within the wall of the duodenum and is joined to its left side by the main pancreatic duct—the duct of Wirsung. The ampulla terminates on the posterior internal wall of the second part of the duodenum at the apex of a projection—the duodenal papilla. This is the narrowest part of the large bile ducts so that quite small stones may completely block it, thus holding back both bile and pancreatic juice and causing jaundice and abolishing pancreatic digestion. In some cases a separate pancreatic duct—the duct of Santorini—entering the duodenum separately and higher up relieves the pancreatic obstruction.

Results of Obstruction.—Complete obstruction of the common bile duct causes jaundice, wasting, anorexia, anæmia, diminution of the coagulability of the blood and liability to hæmorrhage. This delay in clotting makes it difficult to stop bleeding after operations for the relief of jaundice and is the commonest cause of death. It is chiefly due to the fixation of the calcium in the blood by the bile acids circulating in the latter. Long-continued obstruction leads ultimately to the suppression of the bile secretion so that only mucus is seen on opening the common bile duct, and coma from cholæmia is often imminent. Retained bile often becomes infected, causing either infective or suppurative cholangitis. Under these circumstances the gall-bladder becomes overdistended, ulcerated and may even slough or rupture, causing peritonitis.

Obstruction of the pancreatic duct itself or of the duodenal papilla causes more rapid wasting than jaundice alone, and may also set up chronic or acute pancreatitis.

Causes of Obstructive Jaundice.—These may roughly be divided into:—

1. Pressure on the common bile duct or common hepatic duct.

2. Foreign bodies inside the ducts, such as stones, hydatid cysts or blood clot.

3. Disease of the wall of the ducts, such as papilloma, carcinoma or fibrous stricture.

The commonest conditions causing pressure on the bile ducts are carcinoma of the head of the pancreas, chronic pancreatitis, carcinomatous glands in the portal fissure, or hydatid cysts or aneurism in the same situation.

Diagnosis.—The most important causes to be distinguished by us are stones in the common bile duct, carcinoma of the head of the pancreas and chronic pancreatitis. It is the association of typical biliary colic with jaundice of the intermittent or remittent type which characterises obstruction by gall-stones. In two instances I have known the passage of small hydatid cysts cause similar symptoms, and in one I found blood clot in the common bile duct as the cause of very severe pain.[1] Pain due to other conditions giving rise to jaundice, such as carcinoma of the liver, cirrhosis with peri-hepatitis and cholangitis is rarely as severe or occurring in such definite and sudden attacks.

With carcinoma of the head of the pancreas and chronic pancreatitis, the jaundice generally comes on gradually, without pain, and slowly deepens until it becomes dark green. It hardly ever intermits. With both these conditions there are signs of interference with pancreatic digestion, such as increase of diastase in the urine, diarrhœa and the presence of fat and undigested muscle fibre in the stools. With carcinoma of the head of the pancreas, loss of appetite and wasting are usually more marked than with chronic pancreatitis; the former is probably twice as common as the latter. Courvoisier pointed out long ago that an enlarged and palpable gall-bladder is rarely found associated with calculous obstruction of the common bile duct, whereas it is the rule to find it so enlarged with obstruction due to chronic pancreatitis or carcinoma of the head of the pancreas. This is only natural, for gall-stones must have been present for a long time before they work their way from the gall-bladder through the narrow and valvulated channel of the cystic duct into the common bile duct. Therefore the gall-bladder is generally shrunken from chronic inflammation. There are, however, exceptions to this excellent rule, for cases are not uncommon in which separate stones block the cystic duct as well as the common bile duct, causing both palpable enlargement of the gall-bladder and jaundice. Further, carcinomatous obstruction of the common hepatic duct, above the exit of the cystic duct, causes jaundice without enlargement of the gall-bladder and, as a growth of this part commonly causes very severe pain, the condition is generally mistaken for calculous obstruction. The discovery, by pelvic examination, of secondary growth in the pelvic peritoneum proves the cancerous nature of the disease. Ascites and œdema of the legs are also very suspicious signs.

Other important causes of jaundice, usually in a slighter degree, are cirrhosis of the liver and carcinoma of the liver, primary or secondary, and achyluric jaundice of the acquired type must not be forgotten, especially as, in this condition, stones often form and obstruct the common bile duct. However, the enlargement of the spleen, the severity of the anæmia and the fragility of the red blood corpuscles should make the diagnosis easy.

Treatment.

Operation for Gall-Stones.—Operations for the relief of jaundice arising from any cause should be performed as soon as possible, before the risk of hæmorrhage becomes serious. It is rarely wise to wait for more than a fortnight in the hope that a stone may pass or that spontaneous recovery may ensue. It is not to be denied that stones may loosen or ulcerate their way through the common bile duct into the duodenum, but at best this is an uncertain and tedious affair. I have known a stone remain at the duodenal papilla for four months, and the patient died of intractable hæmorrhage after an operation for its removal. Everyone is agreed that an operation should be undertaken early for jaundice due to stones, but it is generally unwise to operate during an attack of fever, indicating cholangitis. It is far safer to wait until this has subsided.

Operation for other Causes.—There is much more doubt as to the wisdom of operating for jaundice due to other causes, such as chronic

pancreatitis or growth of the head of the pancreas or of the bile ducts. When there is no grave contra-indication I am strongly in favour of operation if the gall-bladder is enlarged for, under these circumstances, the jaundice can be cured at a very small risk. The patient is very thankful to be rid of the jaundice with its intolerable itching and risk of hæmorrhage from the gums and elsewhere. Moreover, although the cause may be carcinoma, the appetite is improved and the patient's life is prolonged and made more comfortable by operation, while there is always the chance that the cause is inflammatory and that the short-circuit may bring a complete and permanent cure. At the present time I have several patients living and in good health 10 to 15 years after such an operation, undertaken as a last and apparently hopeless resort for what appeared to be carcinoma of the head of the pancreas.

The best operation for irremovable obstruction of the common bile duct is cholecyst-gastrostomy, for it is easier, safer and more efficient than any other method of relieving the jaundice. Cholecystostomy, with its permanent biliary fistula, is intolerable, and the patient does not live so long after it. Anastomosis to the jejunum often causes kinking and vomiting. Joining the gall-bladder to the transverse colon wastes the bile and perhaps the pancreatic juice for digestive purposes; moreover, infection of the biliary tract is especialy liable to ascend from the colon.

When the jaundice has lasted some weeks it is particularly important to examine the blood and estimate its clotting time. If this is too long, special precautions must be taken to prevent hæmorrhage. Walters[2] injects, once a day for three days before the operation, 5 c.c. of 10 per cent. calcium lactate solution and finds this effective. Transfusion of blood is also another excellent method.

The choice of anæsthetic is important, for chloroform is very likely to be followed by cholæmia and death. In these cases, local anæsthesia and gas and oxygen are much safer.

A long vertical incision, close to the middle line, is chosen if the risk of hæmorrhage is known to be great, for, in this way, few vessels are divided; at the finish of the operation every bleeding vessel is tied and the wound acurately closed. The abdomen is rapidly explored for primary or secondary growths, the biliary apparatus and the pancreas examined and the common bile duct carefully palpated for stone. Any stones found in the lower part are pushed back into the first part of the duct, before the latter is opened, for it is much easier to move them back before the duct is incised and its walls collapse. The stones are then removed and a stout flexible probe is passed downwards, through the duct, into the duodenum to prove the passage clear. It is also passed upwards into the hepatic ducts to seek stones which may have backed there. A small rubber tube, the size of a No. 12 catheter, with several openings near its end, is introduced into the duct and sewn in with fine catgut. This generally comes away in a week or ten days.

When no stone is found but an induration or swelling, of uncertain origin, is felt in the pancreas, in the common bile duct, or in the duodenum, a short-circuit is made between the fundus of the gall-bladder and the stomach, two inches from the pylorus, fine catgut being used. It is hardly ever worth while excising a piece of diseased pancreas for microscopic section, for the material examined and the reports obtained are often misleading. Moreover, the risk of hæmorrhage in these cases is increased by excision. If the swelling is strictly limited to the head of the pancreas, the diagnosis must remain uncertain, but if there are several indurations or the whole of the pancreas is enlarged, the chances are in favour of pancreatitis. After the operation the patient generally improves so much that a strong hope of complete recovery is entertained, at least for a time, but, if the disease is malignant, the improvement does not last long and death usually supervenes within nine months of the onset of symptoms.

REFERENCES.

1. Guy's Hospital Reports, 1912, lxvi., 219.
2. Medical Annual, 1923, 189.

Publications Received.

British Medical Journal, New Cambridge, Medical Review, St. George's Hospital Gazette, Burma Medical Times, The Hospital Gazette, Nursing Times. Indian Medical Gazette, Bratislava Medical Journal. Revue de Médicine, Magazine of the London (R.F.H.) School of Medicine for Women.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Guy's Hospital Appeal Committee.

SIR,—In the very interesting and able summary of the Receipts and Expenditure of the Hospital for 1922, published in the last issue of the GAZETTE attention is called to the contributions from Approved Societies for the maintenance of their members, amounting to £3,359—and indicating an increased contribution from these Societies as a potential source of further revenue.

In this connection it is very noticeable in reading through the Annual Hospital Report how very inadequate is the support extended by the leading Life Assurance Societies to the Funds not only of this, but presumably all General Hospitals.

According to Whitaker's Almanac for 1923, there are 66 principal Life Assurance Companies, 57 of which are British, 8 Colonial and 1 American, while there are in addition 8 British Industrial Companies of which 7 are branches of the above Life Assurance Companies.

In round figures the combined Life Funds of these Companies amount to some 500 millions, while the Life Premium Income approximates 110 million, viz.:—

		£
57	British Offices	46,000,000
8	British Industrial	30,000,000
8	Colonial	16,500,000
1	American	17,500,000
		£110,000,000

Of these only four are regular subscribers to our Hospital, their total benefactions amounting to £68 5s. per annum, and only one Industrial Company included in the above list contributes as an Approved Society.

There are many more Companies, both Life and Industrial, not enumerated in the above list, but if the British Offices mentioned alone contributed an average of £1,000 a year, it would represent an annual subscription to the Hospitals of £65,000, which would be a little more than one-twelfth of one per cent. of their premium Income.

Considering how Medical Science has tended to prolong the expectation of Life during the past few decades, the incalculable benefit the Companies derive from the services of the medical profession in maintaining the public health, the assistance that Hospital treatment gives in preventing premature death and thus prolonging the period during which patients continue their annual premiums, and the fact that it is to the great teaching Hospitals that the efficient training of all future Medical Practitioners is due, it would seem that a more generous recognition of the services of the Hospitals might well be given by the Insurance Companies.

The argument has been adduced that Companies cannot allocate their Shareholders' money in supporting charitable institutions, but surely if the facts of the case were laid before the Shareholders at a General Meeting, they would appreciate that, apart from Charity, it would be a sound business proposition to support Institutions that so largely increase their premium Income and their financial stability.—Yours faithfully,

E.R.P.H.

Appeal Office,
Guy's Hospital, S.E.1.
23rd April, 1923.

Giant Swimming Gala.

DEAR SIR,—I should be very glad if I might bring before the notice of your readers the fact that the United Hospitals' Swimming Club, together with the Swimming Clubs of The Stock Exchange, The United Banks, The United Insurances and the Old Boys' Association, are holding a Giant Charity Gala at the Pitfield Street Baths on Thursday evening, June 21st.

The Charity organizations which will benefit are as follows: Invalid Children's Aid Society, Insurance Clerks' Orphanage, Working Lads' Federation, Dr. Barnardo's Homes and the Waterloo Road Hospital.

In order that the entire proceeds of the entertainment should go to these charities it has been agreed that each of the promoting clubs should raise £10 to defray the expenses incurred in organization. We therefore ask for donations in order that the United Hospitals may bear their part. All sums, both great and small, will be very welcome, and should be handed to the Hon. Secretary of the Hospital Swimming Club, or sent direct to me at St. Bartholomew's Hospital. If over £10, the surplus donations will be handed over to the Charities mentioned.—Yours sincerely,

G. H. DAY,
Hon. Sec., U.H.S.C.

St. Bartholomew's Hospital,
E.C.1.

DEAR SIR,—May I once more ask your space to thank Dr. Symonds for his reply to my letter? I think it is pretty clear that if there be any difference between us it centres on our interpretation of the word "difficult," and partly perhaps on the fact that in the airy spaciousness of the Guy's theatre Dr. Symonds naturally soars towards the

academic ideal, whereas my feet are stuck fast in the clay of practicable routine. I am in complete agreement that in any case of supposed tuberculous meningitis a careful search should be made for tubercle bacilli in the cerebro-spinal fluid; but if the search were to take an hour or more I should certainly consider it legitimate to say that the bacilli were difficult to find.

If I were engaged on a series of fluids from cases of supposed tuberculous meningitis sent to me, for example, by Dr. Symonds, I would gladly spend an hour in searching the slides, and I agree that there would be a reasonable chance of getting a very high percentage of positive findings; but unfortunately that is not the position in which most laboratory workers find themselves. It is a common practice among clinicians when faced with a case of doubtful meningeal symptoms to send a sample of fluid to the laboratory with a request for a cell count and an examination for tubercle bacillli; and experience shows that most of these are not cases of tuberculous meningitis. I am by no means willing to spend an hour over all these specimens, and in thus limiting the length of my search I undoubtedly lower the percentage of positive findings in cases which are associated with the tubercle bacillus. I believe that my practice in this respect is that which is found essential in most clinical laboratories, and I should demur to any suggestion that I had not looked for the bacilli properly.

I know that Dr. Perdrau gets a very high percentage of positive findings, but Dr. Perdrau is well known for the high enthusiasm and untiring energy that he devotes to the unravelling of pathological problems connected with the nervous system, and I should expect him to get much higher figures than can reasonably be looked for in ordinary routine work, and it is with routine work that most of Dr. Symonds' readers will be concerned. The question of asking students to search for the bacilli as a practical exercise in clinical medicine is quite another story. I gave no figures of my own because I have not thought it worth while to look them up; impressions of failure are rarely incorrect, it is the impression of success that requires the check of statistics.

Lastly, I would like to dissociate myself altogether from the accusation of any loose manner of speaking which Dr. Symonds brings against himself. His lecture appeared to me to be an admirably clear and badly needed concise account of his subject; and it was only because I felt that it would be read and treasured by many of those into whose hands it fell, that it seemed to me worth while to point out one statement which, in my opinion, might be found to be misleading.—I am, Sir, yours faithfully,

GORDON W. GOODHART.

24, Warwick Gardens, W.14.
April 21, 1923.

DEAR SIR,—The "Rugger" team having completed their programme, it is interesting to compare 1921—22 with the past season's. The figures are not so good as the previous season, nevertheless they are good. We have been very unfortunate with regard to injuries, having at times quite a number of useful men "crocked." Furthermore, the majority of the clubs the Hospital have played, have greatly improved, and were stronger than in previous seasons. The most outstanding feature of the past season was the brilliant all-round play of P. K. Albertijn; it is indeed a pity he has not taken a "cap" back with him. It is gratifying to know that the Hospital Cup is supported by the Kent County Cup (won by the "A" XV), also the Kent Junior Cup (won by the Extra "A" XV.). On the whole a good "Rugger" season. The following are the figures for this past season, followed by the previous season's:—

1922—23.—P. 32; W. 19, D. 4, L. 9; Pts. for 343, Pts. agst. 201; 65·62 %.

1921—22.—P. 35; W. 26, D. 2, L. 7; Pts. for 467, Pts. Agst. 162; 77·0 %.

—I am, yours truly,

ROY C. HOLLOWAY.

Estate Office,
Peacehaven, Sussex.
April 21, 1923.

DEAR SIR,—The contributions to the Laidlaw Prize Fund to date total £50 16s.

The following is a list of the contributors:—E. R. Boland, J. F. Carter Braine, J. M. H. Campbell, F. Cook, J. J. Conybeare, J. A. Currie, A. H. Fison, G. W. Goodhart, E. C. Hughes, A. F. Hurst, J. Gaymer Jones, M. Maizels, G. Marshall, H. C. Malleson, G. Massey, W. M. Mollison, R. D. Passey, W. W. Payne, M. S. Pembrey, E. P. Poulton, W. E. Tanner, C. P. Symonds, and Sir W. Hale-White.

The list will remain open till the 12th of May, till when further contributions may be sent to the undersigned at Guy's Hospital.

M. S. PEMBREY,
J. J. CONYBEARE,
R. D. PASSEY.

Guy's Hospital,
S.E.1.

DEAR SIR,—

"They came, they cut away my tallest pines,
My tall dark pines."

Thus Œnone.

Let Dr. Ryle reflect, during the remaining months of his tenure of the office of Warden of the College, whilst he is drinking his beer, and smoking his pipe, under the shadow of his best plane tree, that the highest vegetable life does not, as a rule, flourish in the immediate vicinity of salt marshes.—Yours faithfully,

A. R. THOMPSON.

DEAR MR. EDITOR,—As President of the Clubs' Union I have received the enclosed letter from Lord Goschen, the Treasurer of the Hospital. I am forwarding a copy to the Secretary of each constituent Club of the Union, and shall be obliged if you will publish it in your columns as it will doubtless be a source of gratification to all past and present students to be reminded of the keen interest which the Treasurer and Governors of the Hospital take in all matters connected with the welfare of the Medical School.—I am, yours sincerely,

(Signed) LAURISTON E. SHAW.

April 15, 1923.

Seacox Heath,
Hawkhurst, Kent.
13th April, 1923.

Dear Mr. Shaw,—At the last Meeting of the General Court of the Hospital I informed the Governors of the exceptional success in winning Cups which had been gained this year by the Guy's teams in several of the Inter-Hospital Sports, and the Governors asked me to convey their hearty congratulations to the President of the Clubs' Union.

I can assure you that it is a very great pleasure to me to do this and, as Treasurer of the Hospital, I should like to add my own personal warm congratulations.—Yours truly,

GOSCHEN.

Dr. Lauriston E. Shaw.

Notices.

Students are reminded that the Beaney Prize Examination will commence on Monday, May 7th. Intending candidates should apply to the Medical School Office for Forms of Application, on or before Monday, April 30th, 1923.

Student Demonstrators of Dental Histology.

The following students have been appointed:—

Mr. A. S. V. Daniels, Mr. H. E. Spencer-Payne, Mr. C. A. Wakeford.

Guy's Hospital Dental School.

The following Prizes have been awarded:—

Third Year's Prize in Dental Subjects.—Prize—Mr. H. E. Spencer-Payne.

Certificate.—Mr. W. E. Herbert.

Prize for Operative Dental Surgery.—Prize.—Mr. C. A. Wakeford.

Certificate.—Mr. T. B. Berry.

Operative Surgery.

The Operative Surgery classes will start at 12 noon on May 15th, in the Operative Surgery Class Room. These classes are intended only for those students who mean to take the London or Conjoint Finals either in July or October of this year.

Psychological Medicine.

Sir Maurice Craig will commence his lectures on the above subject in the Physiological Theatre on Friday, May 4th, at 9.30 a.m. All students who are desirous of attending this course, are requested to be in attendance as this is the only course delivered during the year.

The demonstrations will be held at Bethlem Hospital, at 2 p.m. on alternate Tuesdays and Thursdays, as follows:—

Thursdays, May 10th, May 24th, June 7th June 21st.

Tuesdays, May 15th, May 29th, June 12th, June 26th.

British Medical Association.

Scholarships and Grants in Aid of Scientific Research.

SCHOLARSHIPS.

The Council of the British Medical Association is prepared to receive applications for Research Scholarships, as follows:—

1. An Ernest Hart Memorial Scholarship, of the value of £200 per annum, for the study of some subject in the department of State Medicine.

2. Three Research Scholarships, each of the value of £150 per annum, for Research into some subject

relating to the causation, prevention or treatment of disease.

Each Scholarship is tenable for one year, commencing on October 1st, 1923. A Scholar may be re-appointed for not more than two additional terms. A Scholar may hold a junior appointment at a University, Medical School or Hospital, provided the duties of such appointment do not interfere with his work as a Scholar.

The conditions of the award of Scholarships are stated in the Regulations, a copy of which will be supplied by me on application.

GRANTS.

The Council of the British Medical Association is also prepared to receive applications for Grants for the assistance of Research into the causation, treatment or prevention of disease. Preference will be given, other things being equal, to members of the medical profession and to applicants who propose as subjects of investigation problems directly related to practical medicine.

The conditions of the award of Grants are stated in the Regulations, a copy of which will be supplied by me on application.

APPLICATIONS.

Applications for Scholarships and Grants for the year 1923—24 must be made not later than Saturday, June 9th, 1923, on the prescribed form, a copy of which will be supplied by me on application.

Applicants are required to furnish the names of three referees who are competent to speak as to their capacity for the research contemplated, to whom reference may be made.

ALFRED COX,
Medical Secretary.

429, Strand, London, W.C.2.
April 3rd, 1923.

Guy's '89 Club.

The following members have notified their intention to be present at the Annual Dinner on May 9th, at the Hotel Cecil:—Messrs. H. W. Beach, F. S. Brereton, C. E. Carpmael, H. W. Collier, C. D. Edwards, C. A. Ensor, John Ensor, C. H. Fagge, W. J. Henson, A. C. Hovenden, Montagu Hopson, H. J. M. Milbank-Smith, H. A. Munro, M. P. Jones, F. J. Steward and H. M. Stewart.

The Secretary, H. J. Spon, will be glad to receive further replies to the notices sent out, *not later than 8th May*, at "Linton," Littlestone-on-Sea, Kent.

Pass List.

Royal College of Surgeons.
L.D.S.
Final Examination.

FEBRUARY, 1923.

PART I.

B. J. Cilliers.
W. F. Howe.
S. G. French.
L. F. Handford.
S. E. Lewis.
J. B. Maree.
A. W. Reynolds.
E. G. Smallbone.
G. M. R. Van der Merwe.
W. L. Boness.
L. M. Cartwright.
I. G. Coutts.
A. S. Davies.
C. H. A. Fido.
J. E. Lloyd.
W. Orsmond.
R. A. Tran.
C. A. Wakeford.
J. E. Jones.
D. W. C. Northfield.
A. H. B. Heesom.
G. A. Lawson Brown.
A. L. Hodgkinson.

PART II.

B. J. Cilliers.
W. F. Howe.
S. E. Lewis.
J. B. Maree.
A. W. Reynolds.
E. G. Smallbone.
C. D. Farris.
E. A. Lloyd.
F. A. Kerrison.
S. R. Mutch.
C. T. Pomeroy.
F. A. Sampson.
E. S. Walmsley.
J. E. Jones.
D. W. C. Northfield.
P. K. Albertijn.
E. A. J. Bradley.
H. A. Clark.
D. W. Griffith.
R. Hofmeyer.
R. Maxwell.
R. C. May.
H. S. Murray.
L. B. Osborne.
J. R. Palfrey.
F. R. Payne.
W. O. Sims.
I. M. Zondagh.
P. A. Tucker.
C. P. Urbani.
F. A. Walker.
G. Zondagh.

Conjoint Board.
First Examination.
Chemistry, Physics and Biology.

MARCH, 1923.

Chemistry.

K. S. Keele.
F. S. Hobbs.
G. W. Rake.
G. K. Lacey.
W. V. Beach.
C. Arkles.
F. H. Channon.
S. E. Knowles.
M. Bewlay.
S. C. Post.
V. L. L. Hall.
R. G. Swiss.
L. J. Martin.
D. C. Buckley.
S. I. Cohen.
G. Evans.
C. N. Talmadge.
C. Rumball.
W. R. Jenkins.
A. E. Grace.
N. C. Yendell.
H. E. Edney.
C. W. Siddle.

Physics.

K. S. Keele.
F. S. Hobbs.
G. W. Rake.
G. K. Lacey.
W. V. Beach.
C. Arkles.
E. M. Maclachlan.
H. I. Maister.
J. J. Sanders.
M. Bewlay.
R. G. Swiss.
L. J. Martin.
D. C. Buckley.
S. I. Cohen.
G. Evans.
C. N. Talmadge.
C. Rumball.
W. R. Jenkins.
A. E. Grace.
N. C. Yendell.

S. C. Post.
V. L. L. Hall.
W. H. Naylor.
G. Fellows-Smith.
H. S. C. Terry.
S. K. Howcroft.

Biology.

G. W. Rake.
H. Brown.
D. Gure.
L. B. Langmead.
E. H. Scan.
E. H. Stevens.

Second Examination.

PART I.

Anatomy and Physiology.

J. C. Fast.
E. T. Kitchin.
P. Berry.
J. H. Anderson.
S. N. Evans.
D. A. Newberry.
H. Waldenburg.
L. P. Tupling.
J. A. Simons.
A. S. V. Daniels.
W. H. Dowell.
R. S. de Bruyn.
W. Nicholls.
W. A. A. Collington.

PART II.

Pharmacy and Materia Medica.

S. N. Evans.
H. van der Post.
H. P. Yew.
A. E. Hill.
W. B. Norcott.
C. H. C. White.

University of London.
Diploma in Psychological Medicine.
Final.

MARCH, 1923.

With Special Knowledge of Psychiatry.

Allen Coulter Hancock.

Guy's Hospital Missionary Society.

The Matron presided at the Annual Meeting of the Missionary Society in the Nurses' Home on April 18th. The report of the year's proceedings was read by the Chaplain, special attention being called to the growing band of old Guy's students and nurses working in various parts of the mission-field, the latest recruits being Nurse Cam (Queen Alexandra's Children's Hospital, Mandalay) and Nurse Banks (China). The celebration of Holy Communion on Thursday mornings (7 a.m.) on behalf of missionary work has been revived.

The balance sheet revealed a sum of £26 6s. 6d. available for distribution. This was disposed of as follows:—

	£	s.	d.
All Day Working Party	3	0	0
Church Missionary Society (Fuh Kien diocese)	2	2	0
Society for the Propagation of the Gospel (Adelaide diocese)	2	2	0
S. Mary's Diocesan Hospital, Zululand	2	2	0
Friends' Foreign Mission Association...	2	2	0
Miss Hope (India)	2	2	0
Miss Haward (China)	2	2	0
Miss Banks (China)	2	2	0
Miss Cam (Mandalay)	2	2	0
Oxford Mission to Calcutta	1	1	0
Miss Hamilton	1	1	0
Balance carried forward	4	8	6
	£26	6	6

Sister Eleanor and Sister Edith were respectively elected Secretary and Treasurer, and the vacancies on the committee were filled by the election of Sister Surgery, Sister Margery, Sister Hilda and sixteen nurses. It was decided to hold a missionary service in chapel during the summer, with a special address by an expert on medical missions. The membership of the Society now totals 140.

House Appointments.

The following Appointments have been made, subject to confirmation by the House Committee:—

House-Physicians.—Mr. F. D. Howitt (May 16) (Dr. Beddard).
Mr. R. Hale-White (May 16) (Dr. Hurst).

House-Surgeons.—Mr. H. W. Harvey (May 16) (Mr. Steward).
Mr. H. A. H. Harris (May 16) (Mr. Rowlands).

Ophthalmic House-Surgeon.—Mr. E. H. Richards (June 1).

Obstetric Residents.—Mr. B. L. Laver (May 16) (Mr. Bellingham Smith).

Out-Patient Officers.—Mr. D. S. Davies (May 1).
Mr. L. Forman (May 1).
Mr. D. G. Sharp (May 1).
Mr. M. Jackson (May 1).

Assistant House-Surgeons.—Mr. G. D. Shaw (May 1) (Mr. Turner).
Mr. N. L. Lloyd (May 1) (Mr. Hughes).
Mr. M. Mitman (May 1) (Mr. Davies-Colley).
Mr. D. B. Whitlock (May 1) (Mr. Bromley).
Mr. G. M. Stoker (May 1) (Mr. Slesinger).

House-Physician for Diseases of Children.—Mr. L. R. A. Wells (June 1).

HERBERT L. EASON.

April 20, 1923.

Specialities.

HUMAGSOLAN, LTD., Faraday House, 10, Charing Cross Road, W.C.2.

Humagsolan is a Preparation containing the predigested keratin in the form of easily assimilable cystin, which, it is maintained, nourishes and stimulates the growth of hair.

This Preparation is the outcome of experiments made, and it is claimed that the results obtained

show that "Humagsolan," which is prepared in the form of metal coated tablets, is effective as an agent for nourishing the hair roots.

To those interested Messrs. Humagsolan, Ltd., will be pleased to give full particulars and send samples.

"PENCILLA"—THE FOUNTAIN-PEN PENCIL.

Messrs. SMITH, PHILLIPS & CO., Harpenden, Herts.

The "Pencilla" is a very clever combination of fountain pen and pencil, well and conveniently arranged as one writing instrument.

It is of handsome design, compact, and most useful to everybody.

The price is no more than that of the ordinary fountain pen, so that there should be a wide demand for it.

Messrs. Smith, Phillips & Co., will be pleased to send sample pen and particulars to anyone, and offer to refund the money to any purchaser who is in any way dissatisfied.

"DIGESTIVE TIPS" TEA.

THE ENGLISH AND SCOTTISH CO-OPERATIVE WHOLESALE SOCIETIES, 100, Leman Street, London, E.

This is a blend of Tea which, it is claimed, has been scientifically built up to obviate, as far as possible, the evil effects of tannin.

It is composed of the young buds taken from the top of the plant before it comes actually into leaf, together with minute portions of the delicate outer edge of very fine Tea which get broken off in the process of manufacture, and analysis shows this blend to contain a minimum amount of tannin.

This Tea has a delicate and delicious flavour, and beyond the fact that it is an excellent beverage for general use, may be thoroughly recommended for persons who require careful diet.

The Societies will be pleased to send samples and full particulars to Medical Men on application.

Landon Out-Patients Tea Fund.

STATEMENT OF RECEIPTS AND PAYMENTS
For the Year ended February, 1923.

Receipts.	£	s.	d.
To Donations and Collections: (as per List)	133	13	1
,, Interest on Invested Funds: 5 % War Bonds 7 5 0			
Deposit Interest 0 19 1	8	4	1
	£141	17	2
,, Excess of Payments over Receipts carried to Balance Sheet	25	18	1
	£167	15	3

Payments.	£	s.	d.
By Cost of Tea, Groceries, Provisions, Fruit, etc.	31	14	6
,, Band	13	13	0
,, Gifts of Toys, Clothing, etc.	103	14	0
,, Police Fees, Gratuities, etc.	5	7	0
,, Printing, Stationery, Postages, etc. ...	6	10	3
,, Decorations, Flowers, etc.	6	16	6
	£167	15	3

BALANCE SHEET, February 28th, 1923.

Liabilities.	£	s.	d.
To Accumulated Funds: Balance brought forward from last Account	281	15	10
Less— Excess of Payments over Receipts ...	25	18	1
	£255	17	9

Assets.	£	s.	d.
By Investments: £200 5 % War Bonds at cost ...	200	0	0
,, Cash at Bankers: On Deposit Account ... 50 0 0			
On Current Account ... 5 17 9	55	17	9
	£255	17	9

Audited and found correct,
W. J. CURRY,
12th March, 1923.

BERTHA MARTIN,
Treasurer.
Landon Tea Fund Committee,
Salomons Centre,
S.E.1.

Athletic Club.

The London University Sports take place on May 23rd. It is therefore necessary that those who can enter should commence to train and help to win the Challenge Cup again.

It is imperative that Guy's should be well represented in all events by new members as well as the "old stagers."

The Secretary would be glad to hear from all new members interested in the sports, to arrange for training, etc. Entries are especially required for the following events:—

High and Low Hurdles,
Throwing the Javelin,
Throwing the Discus,
Throwing the Hammer,
Putting the Weight.

Entries for the University Sports are individual, and all who can should enter.

Entries close on May 8th. All entries and moneys should be handed to the secretary.

A. S. GOUGH, Hon. Sec.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

IT is with the greatest regret that we record in this issue the deaths of three old Guy's men. During the last few months we have had occasion to appeal more than once to the generosity of our readers. Such appeals, however, are relatively few, and we feel sure that the tragic circumstances connected with the death of the late Dr. Alfred George Simmins will evoke a generous response on all sides.

Dr. Simmins was educated at Guy's and Westminster Hospitals, and at the time of his death held posts of responsibility at the Royal Northern Hospital and the Hospital for Sick Children, Great Ormond Street. Unfortunately he and his wife both fell victims to influenza, dying within a few hours of each other on March 23rd. They leave three children, for only one of whom, a boy of 6, some provision has been made. No funds are available for the education of the other two, a girl aged four and a baby boy of sixteen months, and they are left penniless orphans.

An appeal fund has been started and several generous donations have already been received.

Amongst others, Sir William Hale-White, Sir Arbuthnot Lane, Sir Alfred Fripp, and Dr. John Fawcett have given material support.

We trust the appeal will meet with the utmost generosity, which is its due. Donations may be sent to *Prof. T. B. Johnston*, the Medical School, Guy's Hospital, or to the Treasurer, Simmin's Appeal Fund, Royal Northern Hospital, Holloway Road, N.4.

On page 201 we publish appreciations of the late H. Nesbit Eccles and of the late Arthur Pearson, both old Guy's men, the latter of whom met with a fatal accident in South Africa while attempting to rescue a native from a tank into which he had fallen.

THE following donations have been received towards the fund for a memorial to the late Dr. Reginald Koettlitz :—

Dr. J. Fawcett	£5	5	0
Mr. H. L. Eason	5	5	0
Mr. W. M. Mollison	2	2	0
Dr. C. D. Muspratt	0	10	6
Dr. Milligan	0	10	6

THIS issue of the GAZETTE is a Special Publishers' Number, and we would commend to the notice of our readers, students and practitioners, the formidable array of books which appear as reviews, and also in the advertisement columns. The great increase in the number of medical books during recent years por-

trays only too well the enormous advances which have been made in all branches of medicine. Books, but above all books which possess that invaluable quality of appealing to the interest of the reader, are essential for the maintenance of true knowledge.

From time immemorial the cry has been raised against the use of books, but a book, when wisely written and wisely read, never fails to provide food for thought. A good book should be not only the means whereby knowledge is conveyed from the author to the reader, but also a stimulus leading to the desire for further knowledge.

THE Science and Practice of Medical Hydrology are not subjects with which the medical student in this country becomes very familiar. The University of London, through its Board to promote the extension of University Teaching, has arranged, in co-operation with other bodies, the first course on this subject to be given in this country. This will take place at the University on Tuesday, May 29th, and on subsequent days. There will be demonstrations at Shepherds Bush, together with others by Prof. Leonard Hill, F.R.S., at the National Institute for Medical Research at Hampstead.

Harrogate will be visited on a study tour from Thursday, May 31st, to Saturday, June 2nd, and hospitality will be kindly provided by the medical men at Harrowgate for all practitioners and students attending the course.

The fee for medical men will be three guineas for the course, but a limited number of medical students will be admitted free. Names should be sent in by May 19th, either to the Medical School Office or to Dr. Poulton, who will be ready to explain matters further to any of those desiring to take part in the course.

The full programme is given on page 206.

THE new buildings in the Medical School are fast nearing completion and we are pleased to state that they will be officially opened on July 2nd by H.R.H. The Prince of Wales, President of the Hospital. We hope to give further details of the opening ceremony and of the buildings in a future issue.

ON Tuesday, May 1st, Dr. Pembrey laid before a meeting of the War Memorial Committee an account of the money which had been received to date, and stated that the only sums outstanding were the final contributions from those subscribers who had spread their donations over a period of five years. The final meeting of the Committee will be held early in October when the complete audited accounts of the War Memorial will be presented. It is hoped that all subscribers who have still one more donation outstanding will forward this to Dr. Pembrey by the middle of September. This will allow for the closing and auditing of the accounts before the final meeting of the Committee.

The greatest credit is due to Professor Pembrey, who, as Treasurer of the War Memorial Fund, has brought it to such a successful conclusion, and we feel sure that all subscribers will unite in conveying to him their sincerest thanks.

THE Home Office and the Ministry of Health have had under consideration the possibility of the use in medical and surgical practice of substances which might serve the same therapeutic purpose as cocaine, but be free from its deleterious properties. The Minister of Health has finally decided, after consultation with the Medical Research Council, to appoint a committee with the following terms of reference "To investigate the comparative value, for the therapeutic purposes for which cocaine

is at present used, of various possible substitutes, and the evidence as to risk, if any, of such substitutes becoming drugs of addiction."

We are pleased to state that Mr. T. B. Layton has been nominated by the Laryngological Section of the Royal Society of Medicine as a member of this Committee.

On the 23rd May, for four evenings, at 7.45 p.m., at the King's Hall, Covent Garden, the Bank of England Operatic, Dramatic and Orchestral Society will perform "The Mikado." At the same hall, on Wednesday, May 30th, for four evenings, the "Anchorite" Amateur Operatic Society, under the Patronage of the Lords Commissioners of the Admiralty, will perform the "Yeomen of the Guard."

It is pleasing to reflect that two great public bodies should come forward in this way to help the Hospital. Special portions of the hall have been reserved for Guy's men, and tickets, particularly for the performance on Wednesday, May 23rd, may be obtained from the Counting House, where a plan of the hall can also be seen.

On Monday next, May 14th, at mid-day, Mr. F. A. M. Webster, amateur field event champion, will give a lantern lecture at the Hospital on the technique of field events, etc. On Monday evening Mr. Webster will give demonstrations in javelin, discus, and hammer throwing, etc. at Honor Oak Park. Further details, as to time, will be posted in the Colonnade, and it is hoped that all who are entering for the University Sports will make a point of attending the lecture and demonstrations.

On Tuesday, the heats of the 220 yards and of the 120 yards hurdles will be run off, together with the finals of the javelin, discus and hammer. All competitors are requested to turn up at the King's College Sports Ground, Mitcham, by 5 p.m.

On Wednesday, May 23rd, the University Sports will be held at Stamford Bridge. The Guy's Team are making a great effort to retain the Rosebery Cup, and we sincerely trust that all Guy's men will turn out on that day to support the Hospital Athletic Team.

The ninth issue of *Vincula*, a fortnightly journal issued by the University of London Union Society is now on sale in the Wills Library. A supplement is presented with each number of this issue in the shape of the map of Colleges and Athletic Grounds to which we have already referred. The value of this map is undoubted, and it should be in the hands of all club secretaries, and others who from time to time have occasion to visit other Colleges or Athletic Grounds.

Vincula itself does not, at present, contain much matter of interest to hospital men. But we hope that this will soon be remedied and that contributions of general interest, in any shape or form, will be sent up to the Editor by hospital men. The journal has only been in existence for a few months, and the advent of contributions from medical students will do much to make it more truly representative of University life.

We print elsewhere, by kind permission of the *Observer*, an article on the mascots of the various Hospitals and Colleges in London. Unknowingly the writer of the article has given 1911 instead of 1909 as the date when the Guy's Milk Can was captured.

The subject of College mascots has given rise to a somewhat hectic article by our contemporary — *The University College Hospital Magazine*. We propose to deal with this in our next issue.

A Case of Epispadias in a Female Child associated with Complete Incontinence.

This patient, a little girl aged 5 years, was admitted, under the care of Mrs. Vaughan Sawyer, into the Royal Free Hospital. She suffered from incontinence which was practically complete. The labia majora and minora were split ventrally. There was apparently a well marked suspensory ligament passing downward and backward, from the mid line in the region of the normal pubic symphysis. Behind this there was situated an opening admitting No. 12 catheter through which urine leaked. Still further behind was the orifice of the vagina. This was, perhaps, a little small. Behind the vagina the parts were normal. The anus showed no sign of abnormality. Patient had control over defæcation.

Mrs. Vaughan Sawyer asked me to see the case with her, and very kindly accorded me the privilege of operating upon the child in the theatre of the Royal Free Hospital. The operation consisted in making an oval incision deeply round the vulval orifice. A second incision was carried upwards from this over the right rectus abdominis muscle to the level of the umbilicus. The rectus muscle was exposed and divided at the level of the umbilicus; then turned downwards and split longitudinally to within 1 inch of the pubic insertion. The left half of the split rectus was placed in the left side of the incision round the vulva, the right half being similarly placed in the right side of this incision.

The ends were united together, and also sutured as near as possible to the region of the central point of the perineum. The vulval orifice was thus surrounded by muscle. The wound was sewn up with catgut sutures, the first row being placed through the anterior layer of the rectal sheath, and the second row applied Lembert-wise to the superficial fat in the abdominal wall, and round the vulval orifice. The skin was sutured with salmon gut sutures. The wound healed up by primary union.

The patient was holding her water at night within three weeks of the operation.

Thirty-four days after the operation I brought her down to Guy's Hospital for demonstration. The wound had healed perfectly. In spite of the trying experience of being demonstrated, she was holding her water well, and arrived back at the Royal Free Hospital an hour and a half after leaving it, without wetting herself in the least.

Three months after the operation she came to Guy's from her home in the country, having started at 9 a.m.. She was seen at 3 p.m., and had passed her water twice in the interval, at her own request. I saw her two days after this, on the 26th April, at about 8 o'clock at night. She had good control over her water, although she had had a very tiring day. The mother is very pleased with the result of the operation.

The principle of the operation, as above described, depends upon the fact that by turning over the muscle and splitting it, the nerve supply (which is derived from the 12th dorsal nerve, and passes into the muscle quite close to the pubes, and splits into two divisions which pass upwards, and supply the lower two-thirds of that portion of the muscle which lies below the umbilicus) is not interfered with. The blood supply also is not interfered with, for, as is well known, the deep epigastric artery passes upwards and inwards on the posterior aspect of the muscle to which it is adherent and to which it disposes transverse branches at frequent intervals. Thus, neither the nerve nor the blood supply are interfered with by dividing and turning down the muscle as described.

The transplanted muscle acts as a sphincter. The vagina and urethra are included in the same sphincter, but this would appear to be a small point, compared with the establishment of voluntary control over micturition.

I may add that the body of the pubis on one side was separated by an interval of one inch from its fellow—an anatomical condition which associates these conditions of epispadias with the Graves' congenital lesion of "ectopia vesicæ."

A. R. THOMPSON.

Publications Received.

British Medical Journal, Isis, New Cambridge, St. Bartholomew's Hospital Journal, St. Mary's Hospital Gazette, St. Thomas's Hospital Gazette, King's College Hospital Gazette, University College Hospital Magazine, New York State Journal of Medicine, The Antiseptic (India), Medical Journal of S. Africa, Indian Medical Record, The Prescriber, Dental Record, Dental Summary, Architectural Association Journal, Hospital and Health Review, Nursing Times.

The Conclave of Physicians.

In these humdrum days of polite scepticism it is refreshing to know that at one time medical students were in the habit of breaking each others heads over the merits of their rival physicians and that pistols or swords were at one time considered the only effective solution of a scientific dispute.

How stimulating it would be to a student wandering early in the park, if he were to come suddenly on two members of the Staff settling with their umbrellas the precise significance of a cardiac murmur and how it would relieve the arid wastes of a Synopsis of Medicine were he to read that Sir J—m—es Sm—th President of the R—l College of S— could not "pretend so much to the name of a manual operator as a farrier, Sowgelder or Cowleech" or that Dr. Wh—te was "a quack, a mountebank, a cutpurse and a common footpad" for prescribing more than five minims of Tr. of Senna.

These unfortunately imaginary pictures were conjured up by reading a book entitled "The Conclave of Physicians, the first part detecting their intrigues, frauds and plots against their patients," by Gideon Harvey M.D. Physician in ordinary to his Majesty London 1686.

Dr. Harvey appears to have been distinguished alike by his gentleness, tact and modesty, in token of which he starts off with his introduction.

"Reader. I omit complementing you with Courteous, Gentle, or the like, suspecting the major part may prove of a contrary hew; and therefore you are to believe this tract is not written to please many; for which I expect no other reward, than what is in my power to bestow on my self, namely a satisfaction flowing from a sincere design of cautioning Physicians and Chyrurgions, in the exercise of their Profession, by setting before their Eyes the Errors, Frauds and *male*practice of some Physick Doctors of *Paris*, and those also *subtecto nomine*, it being wholly forreign to my intention to detract from the reputation of any man; though living at a great distance.

And whereas gross aberrations adequate to those within mentioned may happen at Amsterdam, Hamborough, or a greater City, whence probably from the consciousness of their guilt some may imagine themselves levell'd at (and so may those at Constantinople, if they conclude the Presidents recital in this treatise may be adapted to any Meridian) I do protest and call Heaven to witness, I did never declare to any man, nor ever shall, that by Paris Physicians and Chyrurgions within named, I mean't any other than those living in the Metropolis of France."

Conclaves or Colleges of Physicians he appears to have held in especial abborrence for he remarks, "Moreover he that is so far debauch'd in his senses as to be admitted into any Conclave of Physicians doth *ipso facto*, as much entitle himself to all their Manslaughter Fourbs and Impostures, as he that is lifted among a Troop of Neapolitain Banditi."

Of the constitution of the Paris conclave he says that "According to the exinanition of their Treasury, once in eight or ten years they proclaim a *Jubilee*, setting open their doors to Physicians, Barbers, Apothecaries, and Renegade Priests, who upon the payment of a certain sum of Chequeers are Honoured with a Fop Character and received into the Church-Porch of Aesculapius" and he then goes on to describe their Proceedings. "Their immolations are celebrated chiefly in the Winter upon Dogs and Cats by the younger fry, and sometimes upon Humane Bodies, performed by the Hangman, their subservient Officer, which being conveyed to their *Chauncel*, the *Cardinals* in their turn fall hewing and flaying these Carkasses like Cannibals, to the intent all spectators may behold them sitting in their *Pontificalibus*, and making a pretended narrower search into the parts of Mans Body insinuating thereby to these Gazers their incomparable Skill and Learning, not without a plain *Innuendo*, that they should send for them in time of *Sickness* . . . but if that be the crafty design of the Venetian Conclave, I wonder they do not print all their Names together in a sheet of Paper with their Dwelling-places, and the name of the Street where they may be spoken with, from eight of the clock to twelve, and from two to six and then cause these advertising sheets to be hung up in every *Apothecaries* Shop, and *Booksellers* Bulk: but after all I doubt that would sound too much like the noise of Ducks [Shades of the Buff Book!!] And what new Discovres have they made in Anatomy these twenty years? Certainly none, and I dare presume to say, I myself have divulged more new *Anato-*

mical Observations, which are of greater use, than all of 'em in a bundle; and yet I must confess, had I imployed those *Anatomical* hours in the study of other parts of *Physick*, I should have made a far better *Physician*; however as I am, I should be loth to stain my Education (which as you may read in my *Casus Medico-Chyrurgicus*, is beyond any *Conclave Physician*) in having my Name and Abode Printed in a Catalogue, though with other *Conclavists*, under pretence of being visited by my juniors, or distinguished from Literate *Mountebanks*, when in effect it's as much, as if they writ over their door, here lies a *Wyer-drawer*. . . . At the beginning of this preamble, I communicated to you what my scope is in publishing these; in the Conclusion I am only to tell you what it is not; and therefore know, it is not to set up a *Beacon* to light Patients to my House, into whose business as I ever was negligent to introduce myself, so being introduced, the least indignity doth stimulate me to leave it, Fees having less influence upon me than upon the least covetous *Conclavist*. For I know no other Vertue great Riches are endowed with, than to make a Man Justice of Peace among his own Servants, and an Innkeeper or Host to his acquaintance, both which offices are rewarded with trouble in abundance and *repugnant to a quiet life*."

How far the reported cases before the Royal Society of Medecine have fallen into colourless monotony is shewn by the contrast with one of Dr. Harvey's cases, "The consequence of mistakes in diseases is so obvious, even to the most obtuse judgements, that it's received for a mathematical deduction, *If the Doctor hath mistaken my distemper, I am a dead man, or —in danger of being so*. And rather than the Doctor will espouse his errour in that point, or permit another (of more sense or experience) to be called in upon him, whereby his punctilio be shocked, or his Fees abated, thou and a thousand more, shall be posted away to the Subterranean Mansions, where all things shall be forgotten, and the evidence against the said Physician wholly cancell'd. Such is the Ingnorance, Avarice and Barbarism perversity of some Physicians, whom Authority and Law do shelter from all manner of Accusations, Scandal or Reproach. The matter of this Paragraph is not so intricate, but you may easily be induced to believe, that where so many Thousands do yield their last Breath to Diseases, in themselves not mortal, it must be imputed to errour in judgment of your Physician; which, how frequent that is an instance or two of some vogued Physicians will render a satisfaction more amply. It was Dr. B. Pr. of C—— (a person sufficiently known) who gave me the recital of this following Case, at the house of Mr. J. M. Surg—. A Gentleman, mov'd through care for the recovery of his (neither sick nor well) Daughter was laps'd into that stupidity of sense as to believe that it was in the capacity of Dr. — to restore her: Upon notice given him, he appears at the Bedside of the Sufferer, where feeling her Pulse large and quick and discerning her Skin sprinkled with a numerous train of red Spots and Blotches, very gravely pronounced his immature deliberation: (viz.) *That the sufferer's life was in more than ordinary danger through the* almost Pestilential *malignity that her feavor manifested by those red tokens*; Therefore time was to be taken by the foretop and she immediately to take her recourse to strong Cordials, a great many Bed cloathes, and a warm Room, to expel the malignity. So imminent a Danger, such great Remedies, offered by so eminent a Physicial (*Oibo!*) could not but be recompensed by a great Fee." He then goes on to discuss what he would have done in like case and we need not quote more, but I find myself unable to forbear another example of his critical method. It is the account of the treatment by some doctors of Paris of a nobleman—"a Sieur of Paris." It starts with a prescription:—

A 21.	℞	Ag. Lard cum Rad. Scorzon ...	℥iss.
		Glycyrrh	℥ss.
		Coit	lb. ij.
		Colatur adde vini claret opt. ...	lb. ss.
		Ag. Cinum. Lard	℥iiii.
	M	Capiat in siti, ℥vi.	

Phl.

A pretty sort of Posset, here is mealy, sour, sweet, wine, water and *Barley Broth*. A compost I assure you not common, for I do not find it in Le Cuisinier Francais.

On the two and twentieth *Phlebotomy* was celebrated on his right Arm to Nine or Ten Ounces.

A 23.	℞	Glycyrrh.	℥i.
		Radix Gentia	℥ii.
		Passul	℥i.
		Cortius Peruviani	℥i.
		Colaturæ capiat ℥iiii. quanta quaque hora per biduum.	

Phl. Morb.

Observe the two last words of this ordonnance *Per Biduum*, and for no longer, otherwise there will be loss of Fees; however, the sufferer had no sooner taken it but he grew worse and the doctors are again summoned, where *Morb* gets his Disciple in to make a Party for the *Jesuit*, in opposition to *Phl* his Posset. Two to one is odds, and therefore the poor old Father of the Family must submit to the pleasure of his sons.

A 24. ℞ Decoc. Pect. lb. iii., Sine Hyssop et Scabiosamm.
Apoz. Bibat insiti. ... .. ʒiii.
Addit. Syr. Viol.
Phl. Fœt. Morb.

Pray tell me, do you think 3 pints of *Pectoral* decoction with those little et cæterus is worth three guineys?

A. 25. Repetator Apoz. Ammon ut Prius Præscript. *Phl Fœt. Morb.*

This *Repetator* at three guineys more is somewhat dearer than Neck-Beef.

A 26. ℞ Ag. Cerus. Nigr. Hyrl. ... ... ʒiii.
Cin. Lard ... . ʒi.
Capiat Cochl. iii., rel. iiii. in lang.

Whats here? No body signs the Bill! Despair Despair. All is like to be lost. The Vessel is overloaded with Bark and there is no opening the hatches by a purge to let the *Jesuit* out. *O la Madonna de'l tempo d'Apolline, miserere tuorum Pauperum Medico um! O Sant Atsculapio, Santo Podalnirio miserere filiorum artis!* The return of the Saints answer to the Supplicants was only: *Alla forca, Alla forca.*"

Space unfortunately forbids me to add any more save the address of the combined physicians to the wife of the patient, "Madam, the great hopes we gave you three days since, would ere now have had the happy effect of your husbands recovery, had the indulgence of his Nurss in giving him that draught of small beer with a Toast in it been forborn, and the putting on of a clean night-cap which together with the keeping of his hands out of bed have brought him so great a mischief upon him that it is not in the power of our Art to make him sweat, spit, make water or go to stool. It is a great satisfaction to me (and the same I hope it is to you) to see three of the greatest Physicians of *France* met here, and concurring with me in the opinion of this Distemper, Method, and Remedies, that have been applied. We have left no stone unturned, had he been my nearest Relation more could not have been done. But the days of man are numbered and the appointed time no man can pass. But let this be your comfort, he is going to a place of rest and happiness; and therefore we must submit to Providence. Madam, if at any time I can serve your Ladyship, either by day or night, or any of your Family, I will come, go or run.

℞ Diasinapios ... . ʒi.
Ag. Hyssopi. ... ... ʒviii.
Gargarism. Pro uso.
Phl. Fœt. Morb. Mus.

Some hours after the sufferer had swallowed down this violent purgative, not being able longer to resist the effects of the Distemper and the Medecines, submits and departs, though not quietly, being perfectly strangled in his throat and leaving the Pills in his Belly for a legacy to the Drs. *Quantum MUTATUS Ab Illo.* So strong and lusty a man reduced to dust and ashes. The names suscribed are the quandam Sieur Phlegmatick, the Docteur *Fœtus*, Docteur *Morbilli* and Monsieur le Docteur Musculus. all good men and true; so help them God."

I should much have liked to give some of Dr. Harrvey's views on Anatomy and Surgeons in general, on "Willis his Hypothesis of Agues is rediculously erroneous" and many other entertaining, diverting and instructive chapters but it would mean copying out the book verbatim and since this is a publishers number of the GAZETTE, I will conclude by saying that this "invaluable little book" is unfortunately not to be obtained of "James Partridge at his Shop at the Post-house between Charing Cross and Whitehall price two shillings and sixpence, in twelves."

CHI KAI.

Change of Address.

F. W. Crook, M.R.C.S., L.R.C.P., L.D.S., Portarlington, College Place, Southampton.

P. McEvedy, M.B., F.R.C.S., 58, Lime Grove, Old Trafford, Manchester.

F. D. Saner, M.B., F.R.C.S., 35, Harley Street, W.1. 'Phone: Langham 2273.

Mr. J. Stuart Smith, 3, Queen's Road, Tunbridge Wells.

B. Moorwood Tonkin, 57, North Street, Vogelfontein (Boksburg), Transvaal.

Reviews of Books.

Hernia and its Radical Cure. By J. Hutchinson, F.R.C.S. (Oxford Medical Publications.) Price 12s. 6d. net.

There can be little doubt that the frequency with which operation for the radical cure of hernia is undertaken has led both to a lack of interest in the condition on the part of the student and to an underestimation of the difficulties that may be met with on the part of the operator.

It is certainly a mistake, as the author points out, to consider the operation as a minor one, and although less spectacular than many abdominal operations it is nevertheless of equal importance to the patient.

Inguinal hernia, since it is the most common of all varieties of hernia, naturally demands most attention and the incidence and causation of the condition are fully dealt with in the introductory chapters.

Whether the common oblique inguinal hernia is always of congenital origin is a problem that admits of no dogmatic answer. The author is no holder of the extreme view, which he regards as unreasonable, and rightly so. It is admitted that nearly all other varieties of hernia are not congenital in origin and there are several varieties of inguinal hernia, whose anatomical pecularities it is extremely difficult to explain on the congenital theory.

In discussing the operative treatment of oblique inguinal hernia it is pointed out that the surgeon may content himself with dealing with the sac, neither opening the inguinal canal widely nor narrowing it with deep sutures in the ordinary way.

While this may be very satisfactory in children, where the tissues of the inguinal canal have not been stretched, it is probably wise in adults to undertake some plastic repair of the canal itself. There can be no doubt that the most essential step in the operation is the thorough and complete removal of the sac. High ligature alone without removal may save the operator a small amount of trouble, but should the ligature become ineffective the hernia may easily reappear, while the possibility of a hydrocele is not remote.

The author in dealing with the sac prefers to twist it before removal, subsequently anchoring the stump behind the origin of the transversalis muscle. In repairing the inguinal canal the lower border of the conjoined tendon together with the upper part of the aponeurosis of the external oblique muscle is sewn to the lower part of the aponeurosis instead of to Poupart's ligament in the usual way. The conjoined tendon is also brought in front of the spermatic cord, which is not disturbed in the tissues in which it lies. Kangaroo tendon is used for all deep sutures and it seems that this suture material is later incorporated with fibrous tissue which it attracts.

In dealing with the contents of the sac several practical details are brought to the notice of the reader.

If catgut ligatures are used for tying off adherent omentum, they should interlock, as slipping is an accident not unlikely to occur with fatal results.

In sliding hernia of the cæcum or sigmoid colon, liberation of the sac wall from the adherent bowel may endanger its blood supply, and here it is better to work around the area of adhesion, returning to the abdomen that part of the sac wall which is adherent.

Regarding the possibility of injuring the bladder, should a thick fat covered elevation present itself on the inner side of the sac, the author advises the surgeon to refrain from cutting into it to demonstrate its nature.

Bassini's operation is given second place only in the treatment of oblique inguinal hernia, it being objected that there is a danger of narrowing the canal too thoroughly with consequent atrophy of the muscle and occasional widening of the femoral canal, and femoral hernia. It is also true that in removing the cord from its original bed to a new one in front of the conjoined tendon the operator is liable to injure the plexus of veins around.

On the other hand Bassini's operation narrows the internal abdominal ring and preserves the obliquity of the canal, in both of which respects the author's operation fails.

The operation attributed to Halstead is one which was used by that distinguished surgeon only in the earlier part of his surgical career. The operation which Halstead later practised up to the time of his death made especial use of the cremaster muscle, the conjoined tendon being brought down in front of the cord, as the author describes in his first method. With this operation orchitis, atrophy of the testicle and hydrocele are no more common than with any other, while the results seem to be somewhat better.

Direct inguinal hernia is always acquired, but it is surely an open question whether operation is advisable. The sac is difficult to remove and recurrence is only too frequent. If any operation is effective it is probably Bloodgood's, in which use is made of the rectus muscle or its sheath to narrow effectively the lower part of the canal. This excellent operation is not mentioned.

In the treatment of umbilical hernia a vertical incision is preferred to the more usual transverse one. The neck of the sac, however, is sutured transversely, but the author is of the opinion that eversion of the edges is better than the method of imbrication advocated by C. H. Mayo.

Of especial interest to those who may be called upon to deal with the acute emergencies of hernia, is the chapter on strangulated hernia.

Regarding the all important question of the viability of the bowel, little mention is made. It is true that the absence of odour, lymph or blood from the fluid contained in the sac is a favourable sign, while it is equally true that bowel which has lost its resiliency and is grey, green or sodden is beyond repair, but in the majority of cases the operator is confronted with bowel whose ultimate fate cannot be so clearly foretold.

If a patch of local gangrene is found it is usually considered sufficient to oversew it, perhaps with the aid of an omental graft.

The author objects that this may lead to kinking, volvulus or adhesions, and no doubt these objections are very true. No better course, however, is suggested or advised.

It is clear that when resection is not considered expedient and an enterostomy undertaken the mortality is extremely high and the reader wonders if enterostomy is ever advisable.

In all operations undertaken in patients with strangulated hernia the importance of washing out the stomach both before and after should be apparent to everyone. It is, however, much less frequently done than is desirable.

The book throughout is written in a clear and lucid fashion and the reader is never in doubt regarding the author's meaning. It is essentially a practical book which may be recommended to all students of the subject.

The Surgical Dyspepsias. A. J. Walton. (Messrs. Arnold & Co.) Price 42s.

The first part of this excellent book deals with lesions of the stomach and duodenum and contains an account of the surgical anatomy and development of the parts concerned. The lymphatic drainage of the stomach and its surgical significance is especially clear and concise.

In the examination of a case of dyspepsia due importance is attached to the case history, and the author points out the possibility of arriving at a correct diagnosis in many cases from this information alone.

The value of the test meal from the surgeon's point of view is discussed and the author prefers to say that in chronic gastric ulcer the acidity is not diminished as opposed to the usual view which was until comparatively recently, commonly held, that in such cases the acidity was definitely raised. This statement might have been made more emphatic for Smithies in his examination of a thousand cases of ulcer, in which the diagnosis was later confirmed by operation, found that in only about 30 per cent. of cases was any hyperacidity present. The author, however, points out the all important fact that an early carcinoma may be associated with a normal acidity or even with a hyperacidity. The signs and symptoms of transition from an innocent a malignant ulcer are clearly described. The periodicity of the pain tends to alter and not infrequently the pain itself may be replaced by a vague discomfort, while vomiting, if originally present, may in the early stages of the carcinomatous change entirely disappear.

Regarding the value of the X-ray examination in gastric and duodenal ulcer the author does not appear to attach much importance to the information available by this means and

suggests that it should only be used as an adjunct to the other data available. It is stated that the barium meal is of greater value in gastric ulcer than it is in duodenal ulcer. This is certainly not the view of Carman, who has a slightly higher percentage of correct diagnoses in duodenal cases, although it is correct, as is pointed out, that the evidence of duodenal disease is usually indirect and it is more common to find deformity of the duodenal bulb than the presence of a nitch or crater.

The chapter dealing with the technique of gastric operations is extremely good and the details are essentially practical. It is followed by a discussion on the choice of operative treatment and this concludes the section dealing with lesions of the stomach and duodenum.

It is unfortunate that the term pyloric ulcer is used since gastric and duodenal ulcers are so unlike in both treatment and results that such vagueness only serves to confuse the issue, and the term is one without any precise significance.

Simple gastro-interostomy as is everywhere admitted is followed by excellent results in cases of duodenal ulcer and pyloric stenosis. The author prefers in all cases where the ulcer is situated near the pylorus, to occlude it by one or other of the recognised methods. He admits, however, that except when the pylorus is completely severed that such an occlusion is only of temporary value, but the measure is justified by the view that the occlusion is sufficiently long standing to allow the ulcer to heal. Surely the pyloric spasm which is inevitable in this type of cases is sufficient to provide this without what seems an unnecessary interference on the part of the surgeon.

In chronic ulcer of the lesser curvature the problem is somewhat different and there is a growing concensus of opinion that gastro-jejunostomy alone is of little value, and there can be no doubt that excision or destruction of the ulcer is demanded whenever possible.

Simple excision is followed by recurrence as a rule, and gastro-jejunostomy is usually necessary in addition, although why this should be the case is not at all clear.

The author seems greatly prejudiced against gastro-duodenostomy in such cases, although combined with excision it would appear to be ideal and is certainly a more physiological operation than gastro-jejunostomy. The chief argument against the former procedure appears to be that neutralisation of the gastric juice is not carried out sufficiently high in the body of the stomach to prevent further ulceration in the duodenum or at the anastomosis. It is known, however, that with ulcers of the body of the stomach, the gastric acidity is usually within normal limits and the possibility of ulcreation at the stoma is much less when the duodenum is used in preference to the jejunum.

For duodenal ulcer the operation has many advantages for it is possible to explore the duodenum and excise the ulcer without additional trouble.

In discussing acute perforation the author very strongly advises gastro-jejunostomy, as he does also in cases of hæmatemesis from acute ulceration. These are very controversial points which with not meet with universal agreement.

That there are certain inherent differences in the various types of peptic ulcer is at any rate very suggestive for why is it that gastro-jejunal ulcer is much more common in men than women while hour-glass stomach is almost unknown in man?

In the treatment, therefore, of the latter condition it does not necessarily follow that the same methods of treatment should be followed as in the more general type of ulcer. The author strongly condemns palliative operations, but does not emphasise the fact that the radical operations carry in these cases a very high mortality. Those who practice operations of less severely, such as gastro-gastrostomy claim most satisfactory results. The extreme rarity of malignant change in this lesion is also suggestive that we are here dealing with a type of ulceration in some way different from simple chronic ulcer.

The pathology and diagnosis of gastro-jejunal ulcer is fully dealt with and it is concluded that this most disconcerting complication of gastro-jejunostomy is mainly due to the use of non-absorbable sutures. Since this complication has become fairly common and better known, every step in the operative technique has been under suspicion as being its cause, the position of the stoma; the use of silk, or clamps, marginal necrosis and injury to the tissues have all been regarded as predisposing factors, but it is clear that they can only be

contributary causes since if they were not, sceondary ulceration would be very much more common that it at present is. In treating the condition a further anastomosis with catgut sutures cannot be regarded as a radical cure as the author believes; Peck has recorded a case in which an ulcer appeared at the stoma three times in succession, and on each occasion the anastomosis was undone and reformed. That the nature of the suture used has very little to do with the condition has been recently shown by Montgomery in a series of animal experiments.

The second part of the book deals with lesions of the pancreas and gall-bladder. The ætiology of gall-stones is excellently discussed and the view that gall-stones are the result of chronic infection is strongly upheld. The technique of gall-bladder surgery is admirably dealt with and the difficulties encountered clearly explained. The chapter dealing with this subject is very appropriately concluded by a discussion on the methods at the disposal of the surgeon in reconstitution of the common bile duct. Injuries to this important structure as the author says are probably more common than is supposed, and as cholecystectomy becomes more generally performed accidents are correspondingly more likely to occur.

It is interesting to note that cholecystenterostomy is preferred to anastomosis of the gall with the stomach or the duodenum, and the author denies any disadvantage of this operation including the possibility of volvulus of the small gut, which is usually regarded as possible complications.

Diseases of the pancreas are dealt with in the same exhaustive way as the earlier chapters would lead the reader to expect. Acute pancreatitis may simulate a gastric or duodenal perforation and not infrequently a case may be mistaken for acute intestinal obstruction. This fact is not mentioned by a great many modern text-books.

In the treatment of this grave abdominal catastrophy which has a mortality of nearly 60 per cent., a preliminary small suprapubic incision is recommended, since this not only gives the operator further diagnostic information, but is of use in draining the pelvis should it be found to contain pus or fluid. The importance of attempting to drain the pancreas is emphasised and the question of draining the biliary apparatus is discussed.

The book is concluded by a chapter on visceroptosis and appendix dyspesia.

The author has succeeded most ably in presenting to the student and practitioner a very complete and excellent account of the modern work relating to the surgery of the upper abdomen. The usual subject text-books in the main, fail to give their readers any correct account of this work and the student finds it difficult to gather information apart from the reading of special papers and articles in the surgical journals. As the author points out in his introduction there is a general impression among students that the diagnosis of the surgical dyspepsias is a very uncertain business. This is by no means the case and the book is much enhanced in value by the case histories which illustrate each disease.

In his attempt to incorporate in one volume the current views of abdominal surgery—already the subject of a vast and increasing amount of literature—the author has set himself a prodigous task. He has succeeded admirably, and all who are interested in this subject should not fail to read this book.

Artificial Limbs and Amputation Stumps. By E. Muirhead Little, F.R.C.S. England. 312 pages, 267 illustrations. (Messrs. H. K. Lewis & Co., Ltd., London, 1922.) Price, 18s.

It required a world war to break the settled calm which had closed down upon the surgery of amputations, a subject that seemed almost to have passed into the lore of another era The introduction of antiseptics had removed most lacerations of the limbs from among the conditions calling for amputation as a primary measure, and largely diminished the incidence of secondary hæmorrhage as an indication for its later performance. Long years of peace had made surgeons unaccustomed to war injuries. Industrial accidents were lessened by improved legislation and machinery, while earlier diagnosis and advances in the treatment of tuberculosis and syphilis had made amputation for disease a rarity. For all these reasons surgeons had turned their attention to other fields, and amputations were left to grow the moss of orthodoxy. They were important at examinations, but only because that definition and fixity which comes with obsolescence had made them suitable tests of the memory and industry of the student.

Till the appearance of the work under review, there were only two books in the English language dealing with the question of amputations, neither of them claiming to treat the subject fully. Mr. Muirhead Little's book, therefore, fills a real gap in surgical literature, and fills it very well indeed. Probably no surgeon has ever been equally qualified to undertake the task. The author has personally treated well over 20,000 amputated men, and has had to supervise and correlate the work of the many manufacturers who made artificial limbs for the War Office and Ministry of Pensions. To this unique experience he adds the accumulated knowledge of a lifetime spent in the treatment of derangements of the locomotor system, and a scholarly and attractive style.

A detailed discussion of the contents of the book is beyond the scope of an ordinary review. It is really a work of reference, and its pages are packed with useful information, aptly illustrated by photographs and diagrams. The subject of amputations and artificial limbs is treated from the historical, clinical, and mechanical aspects, while very full notes on the manufacture and fitting of the different standard limbs are contained in an appendix of 45 pages.

Chapter II., on the more general problems of amputation stumps, should be read by everyone interested in surgery, but the remainder is beyond the requirements of the student reading for examinations.

The book is certain to fill a valuable and permanent role as a work of reference and as a pleasant pasture for the voracious reader in the byways of surgery, while its influence will mould the teaching of future surgical text-books on a subject which they have treated very inadequately in the past.

Duff House Papers. Vol. I. Edited by Edmund I. Spriggs. (Oxford Medical Publications. 1923.) Price 30s.

The first volume of the Duff House Papers includes a selection of contributions to the medical press by members of the staff of the clinic during the last 10 years, but much of the matter, including the two longest papers, now appears for the first time, while of the reprinted articles the majority have been written in the last two years. The book is very well got up. The paper and printing are excellent, while the large number of skiagrams which are reproduced are really admirable. Another praiseworthy feature is that all the principal contributions start with a brief review of the literature, and finish with a summary and list of references. Except for the unusual individual who can remember anything once read, a summary of this type almost doubles the value of a paper for purposes of future reference.

Of the 380 pages, rather more than a third are devoted to articles bearing on the radiographic examination of the alimentary tract, while a similar amount of space is taken up by contributions on diabetes.

The article on X-ray examination of the appendix, by Dr. Spriggs and Mr. Marxer, is probably the best account that has appeared of the technique and possibilities of this method of investigation. It is interesting to read that, by practice and improvement in detail, the demonstration of the appendix was raised from 24 per cent. in the 4th series of 100 routine opaque meal examinations, to 86 per cent. in the 8th series. This paper is illustrated by a coloured plate showing appendices removed at operation, as well as by first rate radiograms. An article on dropped stomach, again with careful description of the radiographic technique employed, is followed by one of the longest contributions—an account by Mr. Marxer of the routine of the radiographic examination of the alimentary tract. This paper is illustrated by 71 plates, one of special interest being Fig. 90, which shows a dilated ampulla of Vater filled with barium, the centre being occupied by an inopaque gallstone.

The longest article is the "Patient's Manual of Diabetes," in which the elements of the physiology of metabolism are explained clearly and concisely, and from this it is shown how diets of the right caloric value and the right carbohydrate content may be obtained with the greatest possible variety. It is questionable how far it is a good thing to give a patient with diabetes such detailed instruction about his disease, or to direct his attention for a considerable portion of each day towards his food and the sugar in his urine. But if this question has been decided in the affirmative, the manual shows clearly how the diabetic may best live. There is a chapter on garden-

ing, so that the patient may have an adequate supply of green vegetables during the winter months, and one on diabetic cookery.

The remainder of the book contains good articles on the results of short-circuiting operations, on the blood sugar in diabetes and the fasting treatment, and a full account of the investigation of an interesting case of pancreatic insufficiency with an analysis of the literature. There are also two articles dealing with food requirements in war time, and a number of shorter papers, among which may be mentioned one on the good results obtained with a pure meat diet in sprue.

The chief criticism we should make of the book, is to question the value of including the patient's manual, referred to above, among a collection of original articles and reprints from various scientific and medical journals. Plate 53, of a "typical hour glass stomach," suggests a spasmodic rather than an organic contraction."

The book will make its greatest appeal to those who are interested in diabetes, and in the investigation of diseases of the alimentary tract. Its most attractive features are the scrupulous impartiality of the conclusions which are dawn by the various writers, and, once again, Mr. Marxer's radiograms.

St. Bartholomew's Hospital Reports. Vol LV. (Messrs. John Murray.) Price 10s. 6d.

Of considerable interest to Guy's men is a graphic account of the life and works of Sir Astley Cooper, who, in 1800, was appointed surgeon to the Hospital, and who thereafter encountered success after success until his death at the age of 73. Few men have ever been capable of putting such steady concentration into his work as he did. The author has spared us neither his virtues nor his shortcomings.

Sir Dyce Duckworth has administered a much-needed corrective in the shape of a reminder of the "Value and Employment of Some Remedies now Much Forgotten or Ignored." The ultra-modern teacher may smile, perhaps at some of these, but it should be remembered that the utility of a remedy is not necessarily in inverse ratio to its age.

Mr. W. Etherington Wilson gives an analysis of the 5th series of 95 cases of Intussusception, and while going into the question very thoroughly is forced to dismiss the causation of 56 of these cases as being "idiopathic in origin."

There is an interesting account by Mr. Glyn Morgan of the "Treatment of Chronic Metritis and Fibroids by X-ray." Only a few cases have been treated in this way, but the results show that the patients have obtained much relief.

St. Bartholomew's Hospital Reports. Vol LVI. (Messrs. John Murray.) Price 10s. 6d.

There is an entertaining extract from the diary of Dr. Edward Brown, dealing with a visit to Paris in 1664, as a young man of 22. The contrast between the seriousness of those days and the levity of to-day is well shown in the detailed account of how he spent his time in the Gay City.

Dr. E. Brown, by the way, was the son of the famous author of "Religio Medici."

Mr. Richard R. Armstrong has written a comprehensive summary of modern attempts to corelate Clinical Manifestations and Serological Types in Pneumococcus Infections. Further research is yet needed on this important problem.

The remainder of the volume deals entirely with jaundice and disorders of the liver.

Sir Humphrey Rolleston has written a concise account of the Physiology of Biliary Secretion. Jaundice is ably dealt with by Pro. Sir F. W. Andrewes, and Jaundice in Children by Hugh Thursfield.

There may also be mentioned two articles on the liver by Prof. E. R. Fraser and T. H. G. Shore, forming a noteworthy contribution to modern ideas on that organ.

Heliotherapy. By Dr. A. Rollier. (Oxford Medical Publications.) 25s. net.

Twenty years ago Dr. Rollier opened his clinic at Leysin for the treatment of surgical tuberculosis by means of sunlight. The results of his experience are now collected in his "Heliotherapy," and they form a record of the greatest interest. The course of treatment usually takes about two years, and the patients undergo a carefully graduated course of exposure to the sun. At first the feet alone are exposed for a few minutes, and as time goes on the area treated is extended and the time of the application is increased. The results produced are illus-

trated by numerous photographs and skiagrams.. Sir H. Gauvain, whose experience of surgical tuberculosis at Alton enables him to speak with authority, has the highest opinion of the value of Dr. Rollier's treatment, which, he says, can be "usefully employed" in England. He also says that artificial light bids fair to make a reliable substitute for natural sunshine. Curiously enough the treatment does not appear to be of any use in tubercle affecting the lungs. A particularly interesting chapter deals with use of the treatment in non-tubercular diseases. Dr. Rollier is to be congratulated on his excellent book.

Dosage Tables for Deep-Therapy. By Prof. F. Voltz. Edited by R. Morton, M.D. (Messrs. Wm. Heinemann.) 10s. 6d. net.

These tables are drawn up as a guide to the practice of the Erlangen method of X-ray treatment. The various scientific factors that have to be considered are taken into account and it is possible to see at a glance the exact dose of X-rays necessary in any disease in given conditions. The price of the book is high, but it is indispensable to those practising intensive X-ray treatment.

Manual of Surgery. By Alexis Thomson, F.R.C.S.Ed., and Alexander Miles, F.R.C.S.Ed. Three volumes. 6th edition. (Messrs. Henry Frowde and Hodder and Stoughton.)

The sixth edition of Thomson and Miles' well-known text-book of surgery is worthy of the attention of every student. We can equally recommend it to the junior student seeking a book whence he can learn the elements of what seems to him a vast and inco-ordinate subject, and to the senior man who wishes to read a book, comprehensive and yet not too long, before presenting himself for one of the final examinations.

A few criticisms of minor points in the book occurred to us, but they were mostly of small importance and involved only matters of individual opinion. Thus while speaking of acute intussusception in the child the authors state: "The clinical picture is so characteristic that there is rarely any difficulty in diagnosis. Acute colitis presents only superficial resemblances and should be easily excluded." This statement will not be endorsed by any harassed house officer at Guy's, where we still find the differential diagnosis between these two conditions a very real and a very disturbing difficulty. We would also venture to disagree with the statement made in the last volume that acute perforation of a gastric ulcer occurs most commonly in young women. This is in opposition to experience and teaching at Guy's.

For the rest the authors have prepared a very well set out, a very readable, and, above all, a very practical text-book.

An Introduction to Electro-Therapy for the use of Students. By Catherine Jameson. (H. K. Lewis and Co., Ltd.) 6s. net.

Electric Ionization. By A. R. Friel, M.A., M.D., F.R.C.S.I. (John Wright and Sons, Ltd., Bristol.) 8s. net.

These two books on electrical treatment are written with widely different objects. The introduction to Electro-Therapy is purely a text-book written for candidates for the examination in medical electricity held by the Chartered Society of Massage and Medical Gymnastics. It gives all the information required for that examination in a clear and concise manner, and no doubt will be widely read by those for whom it is written.

Dr. Friel's "Electric Ionization" has been enlarged on reaching a second edition by the addition of chapters on pyorrhœa endometritis and otorrhœa, by specialists in these subjects. The scientific experiments illustrating ionization are excellent, and have been added to in this edition. We should have preferred more clinical material, but in spite of this it appears to us the best book on the subject for the medical man.

Chloroform Anæsthesia. By A. Goodman Levy, M.D., L.R.C.P., Physician to the City of London Hospital for Diseases of the Chest, formerly Anæsthetist to Guy's Hospital, London. (John Bale, Sons, and Danielsson, Ltd., 1922.) Pp. 159. 7s. 6d.

In a foreword to this book Professor A. R. Cushing states that anæsthesia has not hitherto been brought into clear enough contact with the experimental sciences, and that a combination of clinical and experimental experience is required in order to demonstrate how much the practice of anæsthesia is dependent on the principles of the basal sciences. This book is intended—at least as far as chloroform is concerned—to remedy a deficiency, and is therefore welcome, but we must join issue with Professor Cushing, for we think that his statement hardly does justice to the great work of the late Sir Frederic Hewitt, who did more than any one man within recent years by his constant association with the worker in the laboratory, his numerous clinical observations, sound judgment, and extensive knowledge of the literature, to place the practice of anæsthesia on a firm and scientific basis.

Dr. Levy's book will be of particular interest to Guy's men, for it was during his comparatively short tenure of office as Anæsthetist that he began to realise that much had yet to be learnt of the

principles underlying the administration of chloroform. He decided to devote a large part of his time henceforth to research on this drug. This book is compiled from the papers—some twenty in number—which he has published from time to time dealing with this subject from its various aspects, and must be considered to represent his mature and considered—let us hope not his final—judgment on the problems of chloroform anæsthesia. Many of his views are severe, revolutionary. He does not accept Wade and Finnemore's views on the relative potency of acetone chloroform and ethylic chloroform, but we think that his figures are too small, and a larger experience would lead him to change his mind. The chapters on Pharmacology and Toxicology give an excellent account of the work of other experimenters, and some unpublished observations of his own upon the time taken to cause respiratory arrest in cats by different percentages of chloroform vapour, which agree with Paul Bert's figures for dogs. He concludes that individual idiosyncrasy plays a part. Discussing the respiratory gaseous exchange, he agrees with Buckmaster and Gardner that the oxygen content of the blood is diminished, but thinks that it is due to diminished ventilation, and not to diminished power of hæmoglobin to take up oxygen. He quotes Moore and Roaf and Tissot in his support. The point is of clinical importance in view of the increasing use of the intratracheal insufflation of chloroform. Tissot's experiment is certainly suggestive. The section on the action of chloroform upon the circulation contains the interesting view that the slow pulse rates sometimes observed in man under deep anæsthesia may be due to heart block. But the most important part of this chapter (iv.) is that which deals with "cardiac irritability under chloroform," for it paves the way for the author's original views on the cause of sudden death. His thesis is that under chloroform the ventricles are in an irritable condition; this condition is most marked under light anæthesia. In order to evoke extrasystoles an exciting cause must be superadded and is furnished either by "passive" stimulation, *i.e.*, stimulation by removal of a depressing influence or active stimulation working through the sympathetic and causing a hypersecretion of adrenalin. Thus excitement, struggling, trauma during light anæsthesia may produce sudden ventricular fibrillation. All cardiac depressants protect the heart; of these, chloroform itself in full doses is the most powerful. It was in this way that Dr. Levy explained the occurrence of rapid death following the injection of adrenalin during operation on the nose. Acceptance of this teaching by laryngologists has been general. He rejects the theory of cardiac inhibition due to excitation of the cardio-inhibitory, whether direct or reflex. Exbley's experiments are criticised on the ground that they were performed on dogs under morphia, a drug which renders the vagal centre hyperexcitable in these animals. "Such a condition as permanent arrest of the heart through a vagal reflex is unknown in experimental physiology" (p. 37). He does not accept Dr. Henderson's theory of a connection between acapnia and fatal syncope, and considers that there is not much scope for the rebreathing of CO_2; if the respiration is weak from an excess of chloroform, the chloroform should be reduced. This sounds perfectly reasonable, but it is our experience that rebreathing (if oxygen is not available) is an invaluable help during a legitimately deep narcosis, for there is under these circumstances a tendency towards the development of Cheyne-Stokes respiration in elderly people. We regret that the author does not take a more decided line on the danger of partial intercurrent asphyxia. He doubts the validity of the evidence brought forward by Sir Frederic Hewitt in the Hyderabad Commission, but is careful to add that a condition of partial asphyxia cannot be a desirable one. We hold that it was the most valuable part of his teaching, and that he fully proved his point. Dr. Levy advocates the administration of oxygen whenever the ventilation is seriously reduced and after severe hæmorrhage.

Discussing the dosage of chloroform, he criticises the accuracy of the Vernon Harcourt inhaler and points out that the maximum percentage of 2 per cent. recommended by the Special Chloroform Committee of the B.M.A. is inadequate to produce anæsthesia within a convenient time, i.e., 10 minutes. We note that he thinks it very probable that if chloroform be administered rapidly the repair tension may rise to a high point in the blood in advance of its value in the tissues. The cause, prevention, and treatment of syncope are treated fully in chapter x., and some valuable illustrative cases are given. According to the author, overdosage never occurs suddenly, and as there is no satisfactory explanation of sudden cardiac failure except that provided by his observations upon ventricular fibrillation, we must accept his view that "all clinical deaths occur under light anæsthesia." Over-dosage can, of course, occur in the event of gross carelessness, but he cannot find in all the records "a single one which undoubtedly bears this interpretation." It is, therefore, too little chloroform that kills, not too much. He endeavours to support his thesis by an examination of the cases collected many years ago by the Anæsthetic Committee of the Royal Medico-Chirurgical Society. This startling theory, we may say at once, has met with much opposition, although the great majority of anæsthetists agree that it does account for many of the recorded fatalities. It does not,

however, account for them all. Rapid death from over-dosage does undoubtedly occur. It is well established, both experimentally and clinically, that if chloroform is pushed during struggling, which is attended with irregular respiration and periods of apnœa, a highly concentrated vapour may be inhaled which will produce a direct toxic action on the heart. Dr. Levy also condemns, mainly as the result of his experimental data, induction by CE followed by open ether. Here again we must disagree, for our experience at Guy's, where this sequence has been used successfully in many thousands of cases, is convincing. The technique of cardiac massage is well described. The rest of the book, following an interesting discussion on the physical principles of methods and apparatus, is chiefly occupied with the practical application of the principle already enunciated, the most important being, of course, that full surgical anæsthesia must be induced and maintained in every case. We hope that Dr. Levy is convinced by now of the danger of chloroform in septic cases. The book is written in an attractive manner, and provokes thought; the proof-reading has been distinctly careless. It is more suitable for the experienced practitioner than for the student unaccustomed to sift evidence, for we have an uneasy feeling that the author is apt to take partial views, and to rely too much upon experimental investigation.

Charles White of Manchester. By J. George Adami, C.B.E., M.D., F.R.S. (Messrs. Hodder & Stoughton.) Price 5s. net.

"Too often do we forget those who first force their way along unknown paths which in the future become well-frequented thoroughfares; who first point out to what important ends such paths lead; who persevere through weal and through woe, through opposition and calumny; who never falter in their struggle along the paths they see dimly before them, or even when they must needs grope blindly along the absolutely unknown. Too often is the honour due to these pioneers pushed into the limbo of obscurity by the very weight of the chain, the initial links of which they themselves helped to forge." These were the opening remarks of Dr. Lloyd Roberts, when President of the Obstetrical Section of the British Medical Association, held in Manchester in 1902. This was his last important address, and the topic under consideration was puerperal sepsis. When Dr. Lloyd Roberts died in 1920, at the ripe age of 86, he left by will a bequest to the Manchester Medical School to provide an annual lecture on a medical or scientific subject.

Dr. Adami, distinguished alumnus of the Manchester School, was appointed to deliver the first Lloyd Roberts lecture, and the subject which he chose was "Charles White and the arrest of Puerperal fever." No more appropriate choice could have been made. Charles White was one of those pioneers whose name has undeservedly been pushed into the limbo of obscurity, and puerperal sepsis, though no longer a devastating epidemic scourge, claims here and there a victim and remains the bugbear of obstretric practice.

Charles White (1728—1813) studied under William Hunter, and was for thirty-eight years Chief Surgeon to the Manchester Infirmary, of which he was the founder. In 1773 he published a work on "The Management of Pregnant and Lying-In Women and the means of curing, and especially of preventing, the principal disorders to which they are liable." In this treatise, which had a wide circulation, White emphasised the importance of clean surroundings and fresh air, and laid special stress upon the necessity of efficient womb-drainage. By insisting upon a sitting posture for the lying-in woman he succeeded in preventing the stagnation and putrefaction of the lochial discharges which are undoubtedly an important factor in the production of child-bed fever. White's doctrine became widely accepted throughout England and Ireland, and there is evidence to show that the introduction of these principles by Professor Boër, who had studied in England, into the practice of the Vienna Lying-In Hospital in 1789, had been followed by an immediate and striking reduction in mortality. It was not until 1843, seventy years after the publication of White's book, that Semmelweis, then Professor at the Vienna Lying-In Hospital, taught that puerperal fever resulted from the absorption of decomposed organic material brought to the individual from without. He was able to demonstrate that the incidence of puerperal fever became enormously reduced after he had insisted upon the adequate cleansing of the hands of students coming from post-mortem examinations to the bedside of parturient women. Gordon, of Aberdeen, had come to the same conclusions in 1795, and Oliver Wendell Holmes had, prior to Semmelweis, in 1843 realised that infection might be carried by those in attendance on puerperal women.

Dr. Adami, while he establishes Charles White's claims to a corner niche in the Temple of Fame, somewhat too vehemently assails those who have assigned to the Hungarian Semmelweis the chief credit for the discovery of the cause of puerperal fever. An impartial reader must come to the conclusion that these two great pioneers were approaching the problem from different points of view.

In this published lecture much of Charles White's original treatise is reproduced. It reveals the careful observations of an astute and experienced practitioner. Dr. Adami's extensive annotations

represent a vast amount of research, and his discussion of the ætiology of puerperal fever in its modern aspects should claim the attention of all who are interested in this most important subject.

Operative Dental Surgery. By J. B. Parfitt. (Messrs. Arnold & Co.) Price 21s. net.

A second edition of this essential work has been published by Messrs. Arnold and Co., the chapter on "Cavity preparation and the permanence of fillings" being considerably enlarged, as also has the chapter on "Pain saving." These additions are very welcome in a book of already established merit, and the study of operative dental surgery cannot be regarded as complete without full consideration of Mr. Parfitt's carefully detailed and reasoned methods. A book for every student and equally necessary for every qualified dentist.

The Chemistry of Dental Materials. By C. S. Gibson. (London: Messrs. Benn Brothers, Ltd.) Price 12s. 6d. net.

The question usually asked by a student on the utility of a text-book concerns its merit from an examination standpoint, and in the matter of dental metallurgy some success has attended the use of the text-books already in general use. The more thorough student, however, will welcome this new publication as departing from the practice of offering the minimum necessary knowledge and giving instead an interesting and comprehensive description of the chemistry of dental materials.

The book does not deal with metallurgy only, but gives consideration to all the materials used in the dental laboratory, and also to the chemistry of anæsthetics and antiseptics, although the description of use of the former is open to considerable comment.

Further, some descriptions of mechanical technique are given, matter not anticipated in a book which could be fully occupied with its own subject.

Doubtless such technique will not appeal to many of lengthy mechanical experience, and the suggestion that the method of coating an impression with soap solution or oil be replaced by the lengthy and comparatively costly method of painting the impression with a solution of shellac one part and alcohol eight parts, drying and applying a further coat of solution of sandarac varnish one part and alcohol eight parts, will meet with but few supporters.

It may be professional heresy to suggest that both time and expenditure are matters for consideration, but the fact remains that a really appreciable degree of difference in results is necessary to warrant the adoption of a lengthier and costlier operation.

The book is necessary to all who undertake the practice of mechanical dentistry with any enthusiasm, and is certainly a book on Dental Metallurgy the need of which has been felt for some time as an additional text-book to Smith.

Aids to Operative Dentistry. By Hamilton Jamieson. (London: Messrs. Baillière, Tindall & Cox.) Price 3s. 6d. net.

This book is one of the well-known "Aids" series and deals briefly with chairside work.

So small a book may not be expected to contain reasoning at length on the advice given, but the author's experience in hospital and as a lecturer is sufficient surety for the statements made.

The subject of filling children's teeth is well handled, and although it would not be possible always for a dresser to undertake treatment on the lines given owing to the uncertainty of patients fulfilling appointments six months ahead, the subject should be of considerable interest to the young practitioner.

The methods suggested to replace the use of a rubber dam are ingenious, but sound unwieldy, and it is doubtful if a busy practice of the ordinary type would permit their use.

Cavity preparation is soundly described, and one anticipates a newly appointed A.H.S. gathering much kudos from the new arrivals in the conservation room by advising the dentine button method in difficult thin walled cavities.

Altogether a very useful handbook for the student and those recently qualified, for not only is the severely practical side of conservation work admirably expounded, but the artistry of suggestion and surroundings receives due consideration, culminating delightfully in the spraying of the rubber dam with lavender water for the ease and grace of the patient. A happy thought.

Applied Pharmacology. By A. J. Clark, M.C., M.D., F.R.C.P. (J. and A. Churchill, 7, Great Marlborough Street.) Price 15s. net.

Written with the avowed intention of bridging the gap between pharmacology and therapeutics, this book is arranged according to the therapeutic action of drugs, and is illustrated by observations made upon patients in disease. In this way the subject of pharmacology is presented in a very readable form, and in a volume that is not too large. The chapters are headed: "The pharmacology of the alimentary canal," "The pharmacology of the heart," "The pharmacology of the respiration," etc., and by reading the chapter, which applies to a particular patient, a student will be able to learn what drugs are available for use in the disease under his

consideration, and what are the effects on a particular system of each drug. It is recommended as a book certain of imparting a knowledge of pharmacology, which will last beyond the week of the examination.

Hæmatology in General Practice. By A. Knyvett Gordon, M.B. (Baillière, Tindall & Cox, 8, Henrietta Street, Covent Garden, W.C.2.) Price 5s.

This little book of under one hundred pages contains a very clear description of the methods of staining and examining a blood-film and of the diagnostic value of such an examination. To those who have looked on the technique of blood-examination as something to be attained only by long practice and special skill, its simple technical instructions will come as a welcome surprise. The author recommends a rough examination of the stained blood-film as a part of the routine examination of each patient, and describes what one may expect to find in the various anæmias, infections, wasting and parasitic diseases. Altogether a most useful book, and one especially recommended to men starting work in the medical wards. There are three plates, one in colour.

A Simple Treatment for Tuberculosis. By Owen Paget, M.D. (London: Messrs. Constable & Co.) Price 5s.

By the publication of "A Simple Treatment for Tuberculosis" yet another method is added to the now innumerable list of specific treatments. Dr. Paget's theory is that the nasal raucous membrane is capable of elaborating antibodies in response to the deposition of micro-organisms upon it. Three factors, according to him, dominate the prevention of respiratory tuberculosis and its cure: (1) The circulation of the respiratory current in the regions of the nose superior to the middle turbinate bone. (2) An appreciation of the physiological capacity of the epithelial cells in these regions to produce antibodies potent enough to prevent and destroy the growth of tubercle bacilli in other parts of the body. (3) The discarding of academic pedantry which refuses to admit the presence of tuberculosis until bacilli are found in the laboratory.

Starting with these theories, Dr. Paget treats tuberculosis in all its forms by nasal insufflations of dried tubercle bacilli, and claims almost universal cure. We hope we do not misinterpret Dr. Paget when we say that he claims universal cure, but in his book we find no records of failure. As he says: "It may be asked in what manner a patient is benefited by insufflations. The answer is simplicity itself. All the symptoms are ameliorated." Again, in his own words: "I have by means of insufflations of tubercle bacillary emulsion artificially brought about the resolution of tuberculous consolidation both in its early stages and when secondary changes have taken place and the disease has been present for long years. . . . The mysteries of physiology and pathology are unlimited. But how extraordinary and marvellous is the chain of events whereby a few insufflations of 1/10,000 m.cm. of tubercle bacillary emulsion on the epithelial cells of the ethmoidal region can bring about the resolution of a pathological exudate in the alveoli of the lungs!

These are indeed bold claims and one might reasonably expect detailed figures of results in support of them. These are entirely lacking. The only approach to figures which he mentions are 500 cases of suspected tuberculosis in the Australian army, which he claims were "all improved." "In my first fortnight before treatment commenced there were three deaths. In the following ten months with treatment there were two deaths." Statements uncontrolled and uncorroborated by scientific observation are legion, and by the end of the book they acquire the status of absolute facts. However, faults in method or style do not militate against the value of a treatment.

Improvement in health so universal and apparently so invariable must either depend on the absolute value of the treatment or else on the accuracy of diagnosis and observation. A perusal of Dr. Paget's chapter on diagnosis shows that he believes that any form of catarrh, nasal, pulmonary or intestinal, which lasts over six weeks is tuberculous in origin if not definitely proved otherwise. He says further: "The practitioner will find his reputation and practice increase considerably by an early diagnosis of pulmonary catarrh and tuberculosis. By treating his cases with insufflations he will less often have stories of marvellous cures by nostrums and will find that a large proportion of his neurasthenic patients are really suffering from subacute tuberculosis." The diagnosis of subacute tuberculosis depends, according to him, almost entirely on the immediate improvement as the result of a few nasal insufflations! An independent report of the value of his treatment is given in Professor Adami's preface, where he says that Major Hart, C.A.M.C., who was in charge of an army hospital where Dr. Paget tried his treatment, stated in his report that while convinced of Dr. Owen Paget's complete sincerity, he could not see the improvement in the cases that was manifest to Paget, and as a skilled diagnostician he regarded Paget's diagnostic methods as rough and ready. Professor Adami offers support to Dr. Paget's theory of the importance and function of the nose, and adds "I have, therefore, a distinct sympathy for one who has had the courage of his convictions and who . . . with everything to deter him has worked

on steadily developing his ideas and his method. I can imagine how one of Dr. Paget's enthusiastic type of mind is peculiarly liable to be obsessed and as a country practitioner impatient of the finer details of diagnosis."

One can form no judgment, good, bad or indifferent, from Dr. Paget's book, and we must, in spite of the dogmatism and the naïveté of his statements and conclusions, retain an open mind as to the value of his treatment, especially as we understand it is being tried by local tuberculosis centres in the immediate vicinity.

Practical Physiology. By E. P. Cathcart, M.D., D.Sc., F.R.S., D. Noel Paton, M.D., L.L.D., F.R.S., and M. S. Pembrey, M.A., M.D., F.R.S. (Edward Arnold & Co.) 1st edition. Price 18s. net. (In 2 vols. 10s. 6d. each.)

The work on which this book is based, "Practical Physiology," by A. P. Beddard, J. S. Edkins, M. Flack, Leonard Hill, J. J. R. MacLeod, and M. S. Pembrey, has been used so long, and has been of such value to students at this hospital, that it is hardly necessary to recommend its successor to Guy's men. The last edition of the older volume was published three years ago, and the partial change of authorship was necessitated by the fact that most of the original contributors had given up the teaching of physiology.

The new work is, however, arranged on very much the same lines, the original division into two parts: (1) Elementary and Advanced Course in Experimental Physiology; and (2) Elementary and Advanced Course in Clinical Physiology, being maintained. Full use has been made of the contributions of the original authors.

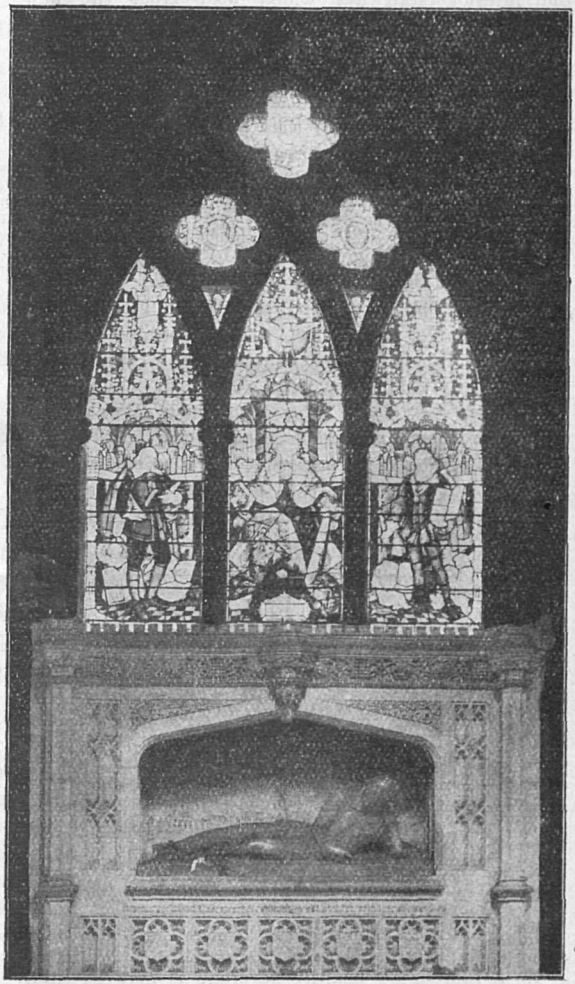
The chapter on the investigation of the Motor Functions of the Alimentary Canal by means of X-rays, a chapter which should be of the greatest assistance to the student in his clinical studies, has been revised by Dr. Hurst, its author.

The present volume has been written with an eye to the bearing of practical physiology upon the study of clinical medicine. The authors state in their preface that it has been their object to give a further extension to practical physiology along these lines, the work which the student is required to perform having a direct relation to medicine, and many of the experiments being performed upon man. A perusal of the book at once convinces the reader, not only of the justice of this claim, but also of the efficacy of the methods adopted in the preparation of the student for his subsequent studies in the wards.

The type is good, the illustrations numerous and instructive. In short, the work is a distinct advance upon its predecessor, which in its time was a wholly admirable practical manual. It may be recommended with confidence to all students of physiology.

The Shakespeare Memorials of London. By W. Bailey Kempling. (Messrs. Werner Laurie.) 5s.

Mr. Kempling has succeeded in producing a new book about Shakespeare which is not redundant even in these days when so many book-makers are



WINDOW AND EFFIGY, SOUTHWARK CATHEDRAL.
From "The Shakespeare Memorials of London."
By W. BAILEY KEMPLING.

writing for, against or about *the* dramatist. The writer has toured London with a photographer and with a wealth of literary knowledge. The operator has made pictures of windows, busts, effigies and prints, and Mr. Kempling's knowledge has, as it

were, illustrated the photographs. The cult of London is very much alive to-day, and the pilgrim could hardly do better than set off, book in hand, to explore his city from the Shakespeare point of view.

Of special interest to Guy's men will be the pictures and letterpress which deal with Southwark. References are made to the George Inn, Southwark Cathedral and Bankside. Two excellent suggestions are made by the author. He quite rightly mentions the inferior stairways which lead from the new Southwark Bridge to Park Street, where stood the Globe Playhouse. Mr. Kempling thinks that the inadequate approach should be re-made and that it should be called "Shakespeare's Stairs." He also humorously proposes that a notice should adorn the top of the steps, worded: "To the *sites* of Shakespeare's Playhouse." This is suggested because of the age-long controversy which has raged between the directors of Barclay's Brewery and the Nectar Tea Company. Their business premises are separated by a hundred yards or so. Both display notices: "Here stood the Globe Playhouse of Shakespeare." Hence the writer's suggestion that the notice should be in the plural. He records a good story told by a local clergyman which must, of course, be true. This gentleman asserts that the controversy has led to bad blood between the two companies. In consequence the officials and workmen of Barclays will not touch Nectar tea. The Nectar people have responded by becoming ardent Prohibitionists.

Specialities.

SYMONS' DEVONSHIRE CIDER.

Messrs. JNO. SYMONS & CO., LTD., Totnes, Devonshire.

By exercising the greatest care in the selection of apples from the best Cyder-producing districts in Devonshire, this well-known Firm has earned a reputation, second to none, for the excellence and purity of their Manufactures.

With up-to-date machinery, special stores, and powerful presses, Messrs. Symons' manufacture on a very large scale.

Every care in taken in the process, and the Cyder thoroughly matured before despatch.

As a thoroughly healthy beverage it may be safely recommended.

Messrs. A. Harper, Sons & Bean, Ltd., write informing us that the Race organised by the Liverpool Motor Club over a 370 mile course, which includes some stiff and difficult hill-climbing as a test for reliability and regularity, was won by their 11.9 "Bean" Car, for which they have been awarded the "Bartley" Cup. The price of these Cars is quite moderate.

Obituary.

ALFRED GEORGE SIMMINS.

Our readers will have noticed in recent issues of the *Lancet* and *British Medical Journal* the tragic coincidence of the death on March 23rd of Dr. Alfred George Simmins and his wife. They fell victims to influenza: the husband being only 32 years of age, the wife just his senior. They leave 3 young children, a boy aged six, a girl aged four and a baby boy of 16 months.

Alfred George Simmins was educated at the Whitgift Grammar School, Croydon. He gained an open scholarship in Science at Guy's in 1910, and in March, 1912, he divided the Wooldridge Memorial Prize in Physiology and was granted a Certificate of Merit in the competition for the Junior Proficiency Prizes. From Guy's he took a University Scholarship at Westminster Hospital, where he had an equally distinguished career. In 1914 he took his Conjoint Board Diplomas and immediately on the outbreak of the Great War he offered his services to his country. He was gazetted Temp. Surg. Lieut. R.N. on August 5th, 1914, and served on a battleship, two hospital ships and at the R.N. Hospital, Haslar. While in the Navy he took the M.B., B.S. degrees of the University of London and also contributed papers to the *Lancet* and the Journal of the R.N. Medical Service. After being demobilised in 1919, Dr. Simmins became Medical Registrar at the Westminster Hospital, a post he held for two years, simultaneously practising in the north of London. In 1922 he started a City practice and was also Assistant Medical Officer in the Venereal Departments of the Royal Northern Hospital and The Hospital for Sick Children, Great Ormond Street.

These multifarious activities proved too much for his rather frail and delicate physique. Early in March he was taken ill with influenza, and his devoted wife was also stricken with the same disease. Mrs. Simmins was very

anxious about her husband and, having been a nurse before their marriage, she insisted on sharing the duties of nursing him. Towards the end she knew that her husband was dying and the shock of this, added to her own illness, was so great that she died early on Friday, March 23rd. A few hours afterwards Dr. Simmins also breathed his last.

Under a quiet and unassuming demeanour he possessed considerable force of character and exhibited untiring industry. He was a good and capable physician and was always prepared to give his patients the benefit of the latest methods of diagnosis and treatment. He was moreover a man of considerable originality having introduced several new details in the method of treating his venereal patients. During the few years he was in practice he had earned the gratitude and affection of his patients, private and hospital. His death at such an early age is a real loss to the profession, for had he been spared he would assuredly have made a name for himself.

Mrs. Simmins, a woman of charming personality and a true help mate to her husband, was formerly a nurse at the Westminster Hospital where she trained. They became engaged before the War and were married in 1915 As has already been mentioned they leave three young children, of whom only the eldest is adequately provided for. The two youngest have nothing and their plight is so pitiable that an influential Committee (of which Sir William Hale-White, Sir James Purves-Stewart, and Dr. G. F. Still are members) has made an appeal to the profession to raise a fund for the benefit of these two children. It is hoped that all Guy's men will contribute to this Fund which we are pleased to see from the *Lancet* and *British Medical Journal* of April 21st has made a good start.

DAVID NABARRO.

HERBERT NISBET ECCLES.

The death of H. Nisbet Eccles of Plymouth, on 11th March, away from the home he shared so lovingly with his wife, is not without our deepest feelings. Both he and his wife were Guyites and they supported the old School of Medicine with more than ordinary sentiment.

It does not seem so long ago that the deceased was in the radiant sunshine of the Hospital heading and leading everything that gave sport to the tired and wearied brain-worker. I believe there was hardly a game or amusement in which Nisbet Eccles did not excel. He was the creative genius in the sporting world at Guy's in his day. And these physical pursuits propped up the Hospital at a time when it was much needed. He inherited professional traits from his father and grandfather, who both practised medicine before him in Plymouth. He was also a descendant of Admiral Lord Nelson, and died in a victorious encounter as did he. The one in naval warfare and the other in a terrible warfare of the human body. Poor Nisbet faced his enemy at great odds with a psycho-therapeutic smile quite exceptionally unique. Part of his left leg was removed 2 years ago, but he rode out to battle and succumbed after four years of practice leaving an excellent following behind him. He would dance with his one leg and smile away his arduous duties, winning the love and regard of his patients. He was materially helped by his model wife to whom we extend our deepest sympathy.

The writer of these few lines, a Guyite, in expressing himself of Nisbet Eccles' success as a practitioner is conscious that it was the psycho-therapeutic smile and his unfailing spirits that made him popular. Dr. A. Grattan Guinness, a Guyite, and contemporary with Nisbet Eccles has taken on the practice and we wish him every success.

JOHN FREDK BRISCOE.

ARTHUR PEARSON.

Arthur Pearson was one of the most charming among men, a very loyal Guy's man and a most distinguished President of the Residents, October to December, 1902. Memories of Arthur Pearson always bring to my mind

those lines which Mr. Rudyard Kipling puts into the mouth of the "English Irregular, 1899—1902," in "Chant-Pagan" (The Five Nations).

Like the English Irregular, Pearson returned to the land where he had found "valleys as big as a shire" to "the place where the lightnings are made twixt the rains and the sun and the moon," where he could ride "through the dark, forty mile often on end, with only the stars for a mark and only the night for a friend."

He did not settle in Rhodesia first of all. Many years were spent in Katanga where he was Chief Medical Officer to the Ganganyika Concessions, an immense territory still in the early stages of mining development when he made his first trek northwards from the rail head of the Bulawayo line. An old Bisley shot, in that immense country he found a life after his own heart, with big game shooting on the path as he made his tours on medical duty from one mining centre to another. He was a great hunter. On more than one occasion he saved the life of a native from a charging lion simply as a result of his coolness in emergency and immense skill with a rifle. It is small wonder that in the Congo country he became a real white man with a tribe of natives who would follow him anywhere and when he returned from England on leave, no matter the day or hour, his boys would be found waiting at rail-head ready to continue the trek northward into Katanga. I remember that he told me once while on leave in London, that the position which he early acquired as a great white chief was not gained as a result of medical services to his followers, it was the effect produced upon the native mind by a kill at six hundred yards range. The party while on trek put up a buck which ran at full speed up the path into the wind. Just as it was clearing a rock at the extreme limit of the field of fire he made a hit, and from that date onwards the boys would have followed him anywhere. Any Guy's man who remembers Pearson will understand that he was one who would take such a position quite seriously, accepting his responsibilities as part of the white man's burden. If a native was missing on the trail and had failed to reach camp, there was a search to be organised, if a boy was in difficulties and in danger of life whether in river or in bush, or lying injured and at the mercy of the first lion following the trail, there was no rest that night until the absentee was recovered.

With such knowledge of Arthur Pearson's character the details of his most sad death in an attempt to rescue a native came to me with little surprise and fill me with an immense admiration for him. I have little doubt that for many years his name will live both in Rhodesia and in Katanga.

Is it surprising, seeing such men have been the early settlers on the trail north from Rhodesia to the Great Lakes and the Nile, that many who know the native well in East and Central Africa view with disapproval any change in the laws which would take from the white man the responsibilities of the ruling race?

I am in communication with Dr. R. C. Mullins and if it seems necessary that old Guy's men of the nineties should undertake any responsibilities which are ours by reason of friendship owing to this most unfortunate accident, I feel sure that the columns of the GAZETTE will be open and that the sympathy of all Guy's men will be assured in furthering any plans and provisions which are our bounden duty.

H. C. MANN.

Post-Graduate Courses in Medicine Gynæcology.

A series of Post-Graduate Lectures and Demonstrations in Medicine and Gynæcology has been arranged for the London Panel Committee. They will be given on Thursdays, at 4 o'clock, commencing on Thursday, 17th May, at 4 o'clock. The Courses are open to all Post-Graduates, and the fee in each case is £3 3s.

Applications should be sent to the Dean, Guy's Hospital Medical School, London Bridge, S.E.1.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Voices from the Past.

Nurses and Nursing.

It is rather the habit of some present day toilers to look on the past as days of comparative ease and leisure, when things did not rush along at the headlong pace they do now. When text-books were smaller and less full of important details; when science was less extensive and one's reading covered a much less area. Ah! those good old times of plenty and of pleasure! They will never return.

Lest the Guy's man of to-day should think that his lot is harder than his predecessor's of his grandfather's time, I will try and throw a light on one certain aspect of things as they were then, which is often kept in the dark rather, and not considered in that impartial light which its importance deserves. "Let sleeping dogs lie," is not a bad proverb, when properly applied, but I am not sure that it is always wisdom for us to hide in silence the occasions when we have acted unwisely or vigorously taken part with the wrong side of the question, where our personal feelings of friendship made us strong partisans of the wrong side. When we felt at the time that we were not altogether satisfied with ourselves, but where we know now that we were opposing progress and obstructing the march of improvement and the elimination of the obsolete and undesirable.

Allusion has been made in the GAZETTE to the unfortunate dispute which occurred many years ago, which nearly resulted in the resignation of the whole staff of the Hospital. Feelings ran very high for the new Treasurer, at the instigation of the new Matron, entirely reconstructed the nursing arrangement of the wards without any appeal to the Surgeons and Physicians or in any way consulting their wishes and this was where the sting lay, for I am sure many felt the need of a change, but the keen resentment raised by the method swamped the approval of the object.

In these days of the educated, intelligent nurse it is almost impossible to visualise the person who acted as nurse in days gone by. Now, the nurse is one of the principal factors which make for recovery in disease, or success in the operation.

There are times when she is the surgeon's right hand. It is on her that he relies for intelligence as to the progress of the patient. Often it is her educated assistance only that helps him in his emergency and frequently it is her familiarity with the steps of an intricate operation that enables him to undertake what otherwise he would be unable to perform. In my student days no nurse was allowed to remain in the theatre during an operation; to-day they are indispensable.

Remember, you will not always be, as now, in a hospital, surrounded with assistance of all sorts. You may be, as I once was, taken out near midnight to see a case of which all I knew was the telegraphic "obstruction of the bowels." That was enough, however, to guide me what to take. The doctor lived in a remote village in the next county and the patient's home was out on the moors miles even from him. Even the trap could not be driven the last part of the way at night. It was a footpath only. We were indeed alone, except for the nurse. The patient was suffering from intussusception. There was no time for delay. It must be done then or not at all. The doctor gave the anæsthetic, whilst the nurse and I removed about two feet of small intestine. Would anyone like to say that the nurse was not as important a person as any of the rest of us?

When I was at Guy's the so-called nurse brought the water, bandages and lint for the dresser and carried off the soiled dressings, but took no part in dressing the wound. A nurse attempting to put on a bandage would have been looked upon as comic. Their real work was hard scrubbing, keeping the ward clean and fetching the beer and food. They were middleaged or old women with rough grimy hands, soiled blue cotton frocks and general

maid of all work look. Even the sisters were often only a little higher in the social scale. Very often widows in straitened circumstances. Sometimes both they and a few nurses were of more gentle birth and came for training, pioneers of the noble army to follow, but there was no systematic training, they were left to pick up what they could.

One morning a medical ward clerk was met by the newly appointed sister as he entered his ward. She was the sister of a distinguished physician of that day. She greeted the ward clerk with the exclamation, "Oh, Mr. Williams, I've got such a splendid case of typhlitis for you this morning." "You could have knocked me down," he said, as he narrrated the incident, on hearing such a learned word come out of a sister's mouth.

The appointment of both sisters and nurses was a monopoly of the Matron's. She genergave the former to some respectable woman of her acquaintance, who had been left insufficiently provided for. The only person who could in any way interfere with this was the Treasurer, as in the instance just quoted.

Then there were also a certain number of servants in the hospital, of the domestic type who had to attend upon the residents and other officials. These also, of course, were appointed by the Matron, no one was qualified to offer an opinion. She appointed whoever she wished. It may now be even hardly credited, but it is a fact that she firmly believed that she was assisting the fallen to once more regain their feet by choosing these servants from the inmates of the female venereal ward. During the whole time I was holding resident appointments, the housemaid of our quarters was a young woman, she looked old, who had been a patient attending my outpatients for tertiary. She had very little nose and palate left, but went through her duties silently and quietly.

A contemporary of mine, the most distinguished man of his year, is living now to corroborate this if necessary, that when he was H.P. there were in all six nurses in Addison Ward, three of whom came direct from the female venereal ward and two more had had illegitimate children.

The same method obtained throughout the whole hospital. Much the same class of nurses existed in all the other hospitals with which I was about that time connected, and the same nursed our private cases. There were no others. Just think of the difference between then, and now. Think of the different outlook, for both patient and surgeon of the present day! Especially in such a case as strangulated hernia, or ovarian cyst, both of which were undertaken then as frequently as now.

You may speak as loudly as you like in praise of the advance in Surgical Art and the Science of Medicine, but do not forget what you owe to the highly trained nurse of the present day.

Fancy a case like the following, happening in the old days. I was suddenly summoned by a capable doctor to a case of ectopic gestation. Whilst he drove off to fetch an anæsthetist I dispatched a nurse to prepare the case for operation, one of the most delicate and skilful duties, in my opinion, a nurse has ever to perform.

By the time I was able to reach the address with everything sterilised, I found everything in perfect order for the laparotomy. No time had been lost, or wasted in giving instruction, no further hæmorrhage provoked. Everybody knew their duty, everything was ready and the area sterilised. So a life was saved. I remember a similar case in '74. Everything was in confusion, nobody was ready, nothing could be taken for granted in the nurse's experience, which was nil; so whilst matters were in even a preliminary stage of preparation the patient died.

The operator of the present day owes as much to the nurse as to the antiseptic methods, if he will only be clean. What possible assistance was the septic charwoman of fifty years

ago. Yet it was then she, or nobody. What knowledge had she of the many possible pitfalls to which each case operated on was exposed? The modern nurse is the absent surgeon's eye. Who cannot call to mind a life saved by the timely note of warning from the observant nurse? A failing pulse, a sign of hæmorrhage, a rise of temperature, and a hundred other things undreamt of by the nurse of days gone by.

In all times, in all professions, there are to be found some unworthy of their high calling; but only those who have had experience know the advantages which the surgeon of the present day derives from the well-trained intelligent brain on which he can now so confidently rely.

SENEX.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—It is stated in a letter from Mr. R. C. Holloway, in the GAZETTE of 28th April, that the Extra "A" had won the Junior Kent Cup. This is unfortunately not the case, since that Cup was lost to R.N.C. Greenwich "A" on 24th March. The Extra "A" are to be congratulated on reaching the final stage, since they were deprived of seven or eight of their players, owing to these being used in the Senior "A" XV. in their effort to win the Cup. Mr. R. C. Holloway, however, does not mention that the Junior Inter-Hospital Cup was won by the "A" XV., who met St. Thomas's "A" in the final round on Thursday, 22nd March.

Holloway is one of our keenest supporters, and we wish to thank him for the great trouble he takes each year to keep statistics of the Hospital Rugby.—Yours, etc.,

S. P. MEACOCK,
Hon. Sec., R.F.C.

DEAR SIR,—I beg to inform you of the following very interesting additions recently made to the GAZETTE Museum of Guy's Antiquities.

The first is an oil painting of Dr. Addison, painted when he was a student at Guy's, which has been presented by Wm. J. Addison.

The other addition which has been lent to the Museum is the framed rules of the United Guyites, formed in 1850. The motto above the crest reads: "Without a friend the world is like a wilderness."

The above may be viewed at any time on application to the Librarian.—I am, yours truly,

GEO. A. WINSTON.

The Wills Library,
Guy's Hospital, S.E.1.
May 9th, 1923.

Pass List.

Conjoint Board.
Final Examination.

APRIL, 1923.

Medicine.

*G. D. Shaw.	C. E. Keast.
*D. B. Whitlock.	J. A. Currie.
*N. L. Lloyd.	M. E. P. Killard Leavey.
R. Brooke.	*G. R. M. Apsey.
*J. L. Woodhouse.	*D. B. Hitchings.
C. Ive.	G. F. Gibberd.
H. C. C. Taylor.	*M. Weinbren.
*W. A. Brown.	E. R. Boland.
D. H. Berry.	A. T. W. Powell.
R. E. Lane.	J. L. Faull.
T. S. Blacklidge.	

Surgery.

*J. L. Woodhouse.	C. A. Probert.
S. C. Bakhle.	M. Honigsberger.
G. F. Gibberd.	*C. G. Bowen.
W. A. Caldwell.	*M. Mitman.
M. Hawke.	*G. H. Fitzgerald.
E. Wornum.	*S. Suzman.
*H. H. Hubbs.	L. G. Housden.
*A. F. Percy.	G. W. V. Parry.

Midwifery.

H. D. Wyse.	M. Hawke.
E. E. Neser.	E. Wornum.
C. Ive.	T. A. Shaw.
H. C. C. Taylor.	E. N. C. Annis.
D. H. Berry.	J. C. G. Dickinson.
R. E. Lane.	H. Seelenfreund.
T. S. Blacklidge.	R. R. Macintosh.
C. E. Keast.	C. W. Greenway.
F. N. Newell-Roberts.	J. A. F. Dennyssen.
M. Myers.	A. B. Davies.
S. C. H. Worseldine.	E. H. Koerner.
J. N. Alexander.	O. G. Morris.
W. A. Caldwell.	A. S. M. Douglas.

* Have now completed the examination.

Society of Apothecaries of London.

APRIL, 1923.

Midwifery.

H. Maclachlan.

Primary Examination.

PART II.

Anatomy.

T. G. L. Davies.

Physiology.

T. G. L. Davies.

Notices.

Lectures and Demonstrations on Medical Hydrology.

To be delivered at the University of London, South Kensington, unless otherwise stated.

Tuesday, May 29th.

10 a.m.—By Leonard Hill, F.R.S., M.B.

The Physiology of Cold, Heat and Light.—The loss or gain of body heat in baths and the effect on metabolism. The loss of heat in still and moving air and the effect of clothing. Local cooling and heating by baths and local heating by radiant energy. The physiological effect of sun baths. Heat stroke and sunstroke. The control of sun treatment by cool air baths.

11.15 a.m.—By R. Fortescue Fox, M.D., M.R.C.P., F.R.Met.S.

The Qualities and Actions of Medicinal Waters.—The definition of Medical Hydrology. A group of physical remedies. The origin of Medicinal Waters. Their distribution and classification according to chemical constituents. The undetermined physical properties of waters. Freshness. The elements of hydrological or "spa" treatment. The influence of places and climates and other accessory factors. The question of dosage. Solvent and eliminant actions. Specific actions.

2.30 p.m.—In the Hydrological Department, Special Surgical Hospital, Ducane Road, Shepherd's Bush, by H. S. Souttar, M.B., F.R.C.S., J. Campbell McClure, M.D., R. Fortescue Fox, M.D., and Arthur S. Herbert, O.B.E., M.D.

Demonstrations and short descriptions of the following forms of bath: (1) The Sedative Pool; (2) Scotch and Contrast Douches; (3) Manipulation Douches and Baths; (4) Whirlpools; (5) Hyperthermal Baths and local Mud Baths; (6) Melted Paraffin Wax.

Wednesday, May 30th.

10 a.m.—By R. Fortescue Fox.

The Actions and Uses of Baths.—The principles of external or surface treatment. The factor of temperature. The action of baths at different degrees of heat on the Circulation, Nervous Centres, Metabolism, etc. Chemical and physical factors—movement. The stimulant and sedative actions of baths. The uses of baths and cooling applications in Acute Disease. "Cooling hydrotherapy." Different kinds of natural baths—Water, Vapour, Peat, Muds, etc.

11.15 a.m.—By Wilfrid Edgecombe, M.D., M.R.C.P., F.R.C.S.

The Treatment of Cardiovascular Affections by Waters and Baths.—Cardiovascular sclerosis—clinical varieties—forms amenable to hydrological treatment—methods adopted. Effects of baths in hypertension. Their influence of medicinal waters. Functional disorders of the circulation. Hypo-tension; its causes and hydrotherapeutic treatment. The treatment of Cardiac Diseases by effervescent baths.

2 p.m.—By Charles W. Buckley, M.D., M.R.C.P.

The Hydrological Treatment of Rheumatism, Gout, Infective Arthritis, and Fibrositis.—The internal use of waters, eliminant, diuretic and purgative. The Mineral Waters indicated in these conditions and their mode of action. External treatment, temperature effects. Natural baths, whirlpool and aërated baths. Douching and douche massage in various methods. Colon lavage. Peat packs and baths. The methods of treatment adaptable to the diseases under consideration in their different forms. The modifying effect of climate in spa treatment.

4 p.m.—By Leonard Hill, F.R.S.

Demonstrations at the National Institute for Medical Research. Recording Kata-thermometer and other methods of controlling open-air treatment. Effect of temperature on the biological action of ultra-violet rays. Methods of investigating the local action of baths. Wind tunnel and moving platform for studying the effect of the cooling power of air on exercise. (The Institute is close to Hampstead Tube Station. Tea will be provided in the Library before the Demonstrations.)

Thursday, May 31st.

10 a.m.—By R. Fortescue Fox.

The applications of Hydrology to Incipient and Chronic Disease.—Relation to functional disturbance, toxæmia and resistance. A natural mode of recovery. The Medical use of heat and cold. The nature and limits of "intensive" treatment. The indications of waters and baths (1) in early life and the period of invasion, (2) in middle life, (3) in the senile period. A brief note on the British Spas.

11.15 a.m.—By Rupert Waterhouse, M.D., M.R.C.P.

The treatment of Nervous Disorders by Waters and Baths.—(1) The physiological action of baths and waters on the peripheral and central nervous system; (2) various methods of treatment: by inter-

ual administration of waters, immersion baths and douches, fomentations, compresses, packs, etc.; (3) indications for treatment in Functional and Organic diseases, and the appropriate treatment; (4) contra-indications.

Study Tour to a British Spa.

Thursday, May 31st—

1.40 p.m. Depart by train from King's Cross (luncheon). 6 p.m. arrive Harrogate. Dinner and Conference.

8.30 p.m. Introductory Address by J. Campbell McClure, M.D.

Friday, June 1st—

10 a.m. to 1 p.m. Paper by David Brown, M.D. on "The Harrogate Waters." Demonstrations and short lectures at the Royal Baths on various bath procedures, by Geoffrey Holmes, M.B., B.Ch (Douches); Kerr Pringle, M.D. (Sulphur Baths); William Bain, M.D., F.R.C.P. (Peat Baths); E. Solly, M.B., F.R.C.S. (Local Vapour Baths); and J. Liddell, M.D. (Colon Lavage).

2.30 p.m. Clinical Demonstration of cases at the Royal Bath Hospital. Radiograms.

5 p.m. Demonstrations at the Pathological Laboratory by Sinclair Miller, M.D., and F. B. Smith, M.D.

Saturday, June 2nd—

Leave Harrogate.

Application Forms, Fees, etc.

Those who wish to take part in the course will kindly send in their names not later than May 21st to W. Edgecombe, Esq., M.D., c/o University Extension Dept., University of London, South Kensington, S.W.7, together with the fee of Three Guineas.

The medical men at Harrogate have kindly agreed to provde hospitality for all practitioners and students attending this Course.

Visitors to Harrogate will make their own arrangements for railway journey.

Guy's Hospital Chapel.

The Superintendent took the chair at the annual meeting of the congregation on 12th April, and the Acting-Chaplain read a report of which the following is a synopsis:—

We have been fortunate in receiving visits during the year from the Bishops of Southwark, Woolwich and Kingston, who have all preached in Chapel. Other special preachers from the dioceses of Southwark and London have included Canon Newbolt, Chancellor of St. Paul's, Canon Maplesden, Chancellor of Southwark, the Hospitaller of St. Bartholomew's, the Chaplain of St. Mary's, and two of our old Chaplains, viz., the Rev. W. A. Dunn, Vicar of the Church of the Holy Spirit, Clapham, and the Rev. A. E. Popham, Vicar of St. Mary of Eton, Hackney Wick. The Devotion of the Three Hours was revived on Good Friday and conducted by the Rev. R. C. V. Hodge, Rector of St. Vedart, Foster Lane. The Ober Ammergau Passion Play lantern slides were shown in Tabard House on Good Friday evening.

The Organist and Choristers of Southwark Cathedral paid two visits, giving a recital in Chapel in the autumn and singing carols in the wards at Christmas.

During the year the Works Department have carried out various repairs and improvements in the Chapel, of which a new staircase from the Chapel Passage to the Crypt is the most considerable. The organ has been taken to pieceses and overhauled at a cost of 67. A portrait of the Rev. F. D. Maurice, Chaplain 1836—46, has been acquired and hung in the passage.

The accounts as balanced on December 30th are as follows:—

RECEIPTS.

1922.				£	s.	d.
Jan. 1.—To balance				9	0	4
Dec. 30.—To general account:						
Chapel Collections ...	20	5	8			
Bright Ward	13	5	0			
General Wards and Boxes	33	18	10			
				67	9	6
„ To special collections:						
Oxford Mission to Calcutta	1	8	1			
Hospital Sunday Fund ...	1	15	5			
Maternity Samaritan Fund	6	0	1			
				9	3	7
				£85	13	5

PAYMENTS.

1922.				£	s.	d.
Dec. 30.—By general account:						
Flowers	15	15	5			
Furnishing	2	0	0			
Printing and Postage ...	8	7	6			
Oil and Wafers	5	4	0			
				31	6	11
„ By special collections (as per contra)				9	3	7
„ By balance carried forward:						
Cash at Bankers				45	2	11
				£85	13	5

Audited and found correct,

W. J. CURRY.

The Chapel Committee were re-elected, vacancies being filled by the election of Sister Alice, Sister Astley Cooper and Nurse P. M. Holmes.

A.G.H.

Mascots and Games.

The Milk Can, the Kangaroo, and "Gladys."

By kind permission of the *Observer*.

London University by now has an imposing array of mascots, some of which have an interesting history behind them.

The Guy's Milk Can dates from 1911, when a Guy's team was travelling to Richmond for the Hospitals' Rugger final, and, stopping at Vauxhall Station, thought that one milk can out of so many would never be missed. The Milk Can has accompanied the Guy's team at all subsequent finals, and is placed on such occasions under the guard of the second fifteen.

Each year that the cup is won by Guy's the year is inscribed on the milk can. By winning the cup for the fourth year in succession at the end of last term, Guy's have the satisfaction of seeing the years 1920, 1921, 1922, and 1923 inscribed on the milk can.

Phineas, the University College mascot, has had the most publicity and by far the roughest career. King's College students first captured him, then Caius College, Cambridge, and then, while University College students were meditating some form of revenge, he was carried off by Guy's. On the last occasion nerves seem to have suffered, because the police were called in to recover the missing mascot. By now University College students have a good many revenges to organise, for at the end of last term their building was painted blue and yellow by East London College.

Among other mascots are the recently adopted King's College lion, and King's College Hospital Kangaroo.

The Kangaroo belongs to a basket-maker in Waterloo Road, and was first "borrowed" by King's College Hospital two years ago, permission to borrow being asked for and received after the event. She is now regularly borrowed for ceremonial occasions.

There is little fear now of Bart's gun being stolen again, for the students have fixed it with cement. The gun is one of those which lined the Mall after the Armistice. When Bart's men removed it to a better emplacement the War Office indignantly demanded its return. That was not an easy order to comply with, for University College had in the meantime removed it from Bart's to Gower Street. It was recaptured by Bart's after one of the most furious "battles" in the history of London University. In its admiration no doubt of the damage done by Bart's to University College, the War Office then presented the gun to Bart's.

The latest addition to the corps of mascots is "Gladys," the figure of a Lyons waitress, hitherto an exclusively Lyons mascot, now adopted by the Royal Dental Hospital. She made her first appearance in a life-size form at the final for the University Rugby Cup at the end of last term.

Swimming Club.

On and after Tuesday, 8th May, Walter Brickett, coach to the British Olympic Swimming Teams, will attend in the Hospital Bath, at 12.15 p.m., on Tuesdays, for the purpose of giving instruction in Swimming, especially in the "crawl."

Members of the Club's Union will be admitted to the classes on payment of one shilling per lesson. Names should be given to the Assistant Hon. Sec., Mr. S. E. Theis, or to myself.

Men not taking advantage of this course are especially requested not to use the Swimming Bath at this hour on Tuesdays.

JOHN SIMONS, Hon. Secretary.

Papers by Guy's Men.

J. B. Parfitt, M.R.C.S., L.R.C.P., L.D.S. Local Anæsthesia in Conservative Dentistry.—*Brit. Dent. Jour.*, xliv., 1923, p. 425.

R. P. Rowlands, M.S., F.R.C.S. A clinical lecture on Subcutaneous rupture of the intestine.—*Brit. Med. Jour.*, 1923, i., p. 716.

Birth.

COFFIN.—On May 3rd, at 2, Meadway Close, Golders Green, N.W.11, to Mr. and Mrs. Stephen Coffin, a son.

Marriages.

GOSSETT—WILSON.—On the 26th April, 1923, at Christ Church, Mentone, by Canon Allison, Col. Allen Butler Gossett, C.M.G., to Miss Olive Wilson.

BROWNE—DUNKERLEY.—On 25th April, 1923, at St. Matthew's, Denmark Hill, S.E., by the Rev. Canon H. L. C. de Candole, M.A. (Canon of Westminster), assisted by the Rev. G. E. Arrowsmith, M.A., the Rev. Lindsay Browne, M.A., Vicar of Bishop's Sutton, Hants, to Florence, second daughter of the late William Dunkerley, of Chorlton-cum-Hardy.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 910.] May 26, 1923. [Ninepence.

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Passim.

AT a recent meeting of representatives of the Gilchrist Trustees and Guy's Hospital Medical School, it was resolved to establish an Annual Lecture, to be termed "The Fison Memorial Lecture", in memory of the late Dr. A. H. Fison, the scope of the Lectures to be "The Philosopical Aspects of Science" in the widest sense of the words.

The endowment of the Lectureship will cost a sum of £500, and, to meet the additional expenses of advertising and of publication, a further sum of £500 should be obtained. The Fund will be administered jointly by the Gilchrist Trustees and Guy's Hospital Medical School. Subscriptions are invited from the late Dr. Fison's Old Students and others interested. Cheques should be sent to Professor T. B. Johnston, Guy's Hospital Medical School, London Bridge, S.E. 1., and crossed "Fison Memorial Fund Account".

We publish on page 215 a letter dealing with the subject of accommodation for surgical ward clerks during "take-in" week. It is apparently the view of the authorities that the appointment is not in any sense official or compulsory, and, this being so, that no sleeping accommodation can possibly be provided.

We are strongly of the opinion, however, that some recognition should be taken of the demands upon the time of ward clerks and of the efficiency with which they invariably work, especially during such an arduous period as "take-in" week. It is only during this week that a ward clerk has the opportunity of obtaining an insight into innumerable operations and other work such as hardly ever occurs in the ordinary routine of a surgical appointment. In addition he is brought into contact with many traditions of the Hospital, with which, should he return home every evening, he would otherwise never meet. It is essential, moreover, for the efficiency of a "take-in" dresser that he should not only have done an appointment as a surgical ward clerk but that, as such, he should also have taken his share in the work done during the night. This can never be properly accomplished without the provision of sleeping accommodation which alone enables a man to be on the spot when wanted.

It has been necessary in the past, after 11 o'clock at night, when there is only one porter on duty in the Front Lodge, for the "take-in" ward clerks to fetch trolleys and take all patients, whether surgical or medical, up to the respective wards. Were the ward clerks to leave Hospital in the evening this work would fall upon the much harassed dressers. Surely it is too much to call up a dresser, who often

does not get to bed till 2 or 3 o'clock in the morning, and ask him to fetch a trolley from the Front Lodge and take a case up into the *Medical Wards*!

In view of these reasons, if not for the health of the men concerned, we sincerely hope that this matter will be re-considered, and that an effort will be made to ensure adequate sleeping accommodation for the "take-in" ward clerks. From our own observations it seems quite feasible to accommodate one ward clerk in one of the single bedrooms in the Surgery and the other in the Assistant House-Surgeon's room in the College, provided the latter be willing. Even should this be impossible we would urge that steps be taken to provide other accommodation. Were it merely a matter of expense we feel sure that the ward clerks would, in most cases, be only too pleased to pay a small sum for the comfort of being able to sleep in peace when such is possible.

THE University of London Sports were held last Wednesday, May 23rd, under the most depressing conditions. Rain fell continuously throughout the afternoon and the track became more and more lost to view under a swelling river. General surprise was expressed on Steyn being beaten in the 200 yds. race, and as he did not run in the quarter-mile, we were beaten for the Roseberry Cup by two points. The heartiest congratulations are extended to University College, who thoroughly deserved their victory of the Cup, having set about winning it with a keenness and enthusiasm that is most excellent and enviable. Steyn, by winning the sprint and the long-jump and being placed second in the 220 yds., won the Lady Busk Cup for the third time, thus maintaining our athletic prestige as a Hospital. But the fact that one man is left to do this is very regrettable. That nine hundred students will leave the winning of athletic cups for the Hospital to one of their number quite happily,and be content themselves to go down to see him win them, is a very poor conception of esprit de corps. Lacey, Hutchinson, Gough, Selby, Tregarthen, Leslie and Housden have all put in a certain amount of training, as, we believe, have one or two others. But more conscientious training will be necessary if we are to defeat the exceptionally strong team from Bart's. that we shall meet this year in the Inter-Hospital Sports at Stamford Bridge on June 20th.

On Wednesday next, May 30th, the Hospital Sports will be held at Honor Oak Park at 2.30 p.m., and we cannot urge too strongly all men, whether competitors or spectators, to turn up and make a real success of these events. We can only pray that the weather will be slightly better than it was on Wednesday last!

WE print elsewhere an editorial article from a late issue of our contemporary the "University College Hospital Magazine," together with a letter in reference to it. Our correspondent has, we feel, dealt faithfully with most of the points raised in the article. He will, no doubt, be laid open to the gibe of imitation in returning the compliments so dutifully and carefully paid to us; but when the plea of law and tradition is raised we can only remark upon the fact that, if the appropriate dates are consulted, our learned contemporary will discover that its assertions are almost a century behind the times. It is apparently, judging by correspondence elsewhere on this subject, a common failing at a certain institution to dwell on the trivial glories of the present and to forget the reverses of the past.

It is not our purpose at this time and place to enter into or prolong an offensive or scurrilous discussion. We will only add, as has been ably stated elsewhere, that were it not for those who have captured Phineas the "notoriety of that individual would now be almost nil."

THE Hospital Rowing Club are to be congratulated on the two excellent victories which they have recently achieved, even though the Junior Cup was lost to Bart.'s. On May 11th in the Hospital Boat Races the Guy's Eight put up a grand fight and thoroughly deserved their victory. The greatest credit is also due to Mr. Caldwell, whose management of the boat could not have been better. At the start Bart.'s pulled away slightly, but the Guy's men responded and soon caught up their opponents. At Harrods Caldwell made full use of the tide in mid-stream, and thus gave his boat a useful lead which they were careful not to lose. The decision, thereafter, was no longer in doubt, and Guy's men won by the comfortable margin of three lengths. In the Junior Race we were not so fortunate and Bart's reversed matters by winning outright by 2½ lengths, or more.

It was unfortunate indeed that the good ship "Gaiety" should have broken down at a crucial moment opposite Harrods and deprived the spectators who were on board of the view of the race!

On Wednesday, May 16th, the Guy's Eight rowed University College and Hospital, from the Mile Post to Putney, and again won by a comfortable margin of about 2½ lengths.

OUR heartiest congratulations to all at St. Bartholomew's Hospital who celebrate, the week after next, the octocentenary of that institution. Although our greatest rivals in many ways we convey to them our sincerest wishes, and trust that the relations between the two hospitals will always be of the best, and that the spirit of healthy competition which has been such a feature of hospital life in the past will prosper and be continued far into the future.

WE publish in this issue a summary of the Rugby Football Club for the past season, and our thanks are due to Mr. R. C. Holloway, a keen supporter of the club, for the excellent series of statistics with which he has furnished us. The facts as provided speak for themselves, and there is no need for us to comment upon them.

For over two years the fame of the Guy's Rugby Team has spread far and wide, and we feel sure that all Guy's men will join with us in conveying our sincerest thanks to Mr. S. P. Meacock, who for the past two seasons has done so much, as Hon. Secretary of the Rugby Club, to insure the success of the teams. The laborious work of a secretary never shows itself in the limelight, but the results achieved justify only too well the tremendous energy which Mr. Meacock has put into his duties, and the success with which he has met.

RUMOURS have reached us that Derby Day will again be the occasion for a visit by Guy's to Epsom Downs comparable to a similar happening last year when so much was done for the Combined Hospitals Appeal. Further details will, no doubt, have been announced by now and the venture will, we trust, meet with all success.

ENTRIES for the GAZETTE Competition have been steadily coming in, and in the near future the closing date will be announced. We would urge all Guy's men who have not entered to do so as soon as possible.

WE are pleased to state that, as a result of the appeal in our last issue, the following donations have been sent in by Guy's men towards the Simmins Appeal Fund:—

Anonymous	£21	0	0
A. F. Hurst	10	10	0
A. J. M.	3	3	0
J. Gaymer Jones	1	1	0
A. D. Marston	1	1	0
D. G. Greenfield	1	1	0
D. Tilbury	1	1	0
H. Steinbach	1	1	0
Hubert Daw	1	1	0

Further donations will be gladly welcomed and should be forwarded to Prof. T. B. Johnston, the Medical School, Guy's Hospital, S.E. 1.

A South London Rebel.

Mr. Fisher Unwin has just issued a book which is a real contribution to the modern history of South London. The book is by a working man, now in his eightieth year and is called "The Recollections of a Labour Pioneer." In spite of the fact that the story relates the adventures of an advanced democrat almost the whole Press has reviewed the book with marked approval and sympathy.

Francis William Soulter, the writer, was born in Lambeth. When quite a child he was left unprovided for. He received a certain amount of education at the British and Foreign School, Borough Road, and went out to earn his living in some saw mills at the age of 12. One of his early experiences was a ride in a small butcher's cart. He contracted scarlet fever and was due to go to the Islington Hospital. After very long delay a butcher wearing the habit of his trade drove up to his home and placed the boy in the cart, the body resting upon the straw which was red with the blood left by joints of beef and mutton. The cart was small and the resting place was cramped. However, Soulter eventually arrived at Islington and the cart resumed its normal activities. We know nothing of the condition of the butcher's unfortunate customers, but history proves that Soulter recovered.

In his teens the lad became an attendant at the South Place Institute where he enjoyed the Sunday morning lectures and the classical music provided in the evening. He says, pathetically, that he gained a love of the best music, but poverty prevented him from hearing more than a very little of it. When he marrried he was earning £1 a week and after a time this was increased by 7s. 6d. While earning this excessive wage the constituency of Southwark became vacant. This was in 1869. He at once determined that a Labour candidate should contest the seat. The *Daily Telegraph* took the line that he was right, because it held that working class voters should be represented by members of their class. Money was the great difficulty, but the *Daily Telegraph* came to the rescue as did Mr. C. E. Maurice, son of the Rev. F. D. Maurice sometime Chaplain of Guy's. The contest throws a good deal of light on the political arrangements of the time. Electors were not allowed to mark their own papers, but had to appear before clerks who were not always free from party bias. These clerks had to be carefully watched and Odger, the Labour candidate, was only able to secure the services of 40 men to watch the 79 clerks who were marking papers. Among his helpers were Sir Charles Dilke and Professor and Mrs. Fawcett. The day came. There were candidates representing both the "authodox" parties. Polling ended at that time at 4 p.m., and at 2.20 p.m. the Liberal candidate withdrew in favour of Odger. This helped the Labour man to a certain extent, but he lost the fight. The figures were:—

Conservative, ...	4,686
Labour	4,382
Liberal	2,867

Naturally Soulter is proud of a notable, if unsuccessful, achievement. He was really the power at work throughout the fight.

A few years after disturbing the great parties in the State he began a war with the Church. When Gladstone abolished Church Rates he exempted a few ancient and peculiar parishes. One of these was the Parish of St. Saviour, Southwark, then, as now, hemmed in by a network of Acts of Parliament. Soulter was not a Churchman and he objected to paying a Rate for the upkeep of buildings in which he had no interest and ministers he disapproved. After a time he became a passive resister and his eight-day clock was distrained. Then others joined him and their goods were captured for the "Glory of God and the benefit of the ministers of St. Saviour." The articles were taken to an auction room, but speeches rather than bids were the order of the day, to the dismay of the innocent auctioneer. Several people spoke for an inordinate time and finally a gentleman arrived leading a deputation from the Camberwell Anti-Church Rate Society. He spoke for a long time and gave the history of the relationship of Church and State over a period of a thousand years. He concluded by buying in all the goods and presenting them to the Southwark resisters.

At this time the Rate was made by a local dignitary (the office still exists), the Warden of the Great Account. As it were by a miracle the office fell at this time to a Radical and rabid Dissenter. Hope filled the breasts of his fellows but, once in office, "Great Account" deserted his friends and made the Rate with-

out protest. This resulted in one of the most extraordinary scenes ever witnessed in Southwark. The resisters were organised by Soulter. They hired a band, banners and two large carts. One cart they filled with distrained goods and the other bore proudly the effigy of "Great Account." The police were duly informed. They raised no objection to a procession and speeches, but they laid it down that the effigy must not be burned. The procession of execration moved round the parish. Slowly it passed the house of the offending Warden the band playing the Dead March and the children distributing the "last dying confession" of a renegade. Onward the procession moved until it reached the centre of Southwark Bridge where, with funeral rites, the effigy was thrown into the Thames.

The resisters were not daunted by the human weakness of their friend. Soulter, their leader, determined to go to the Borough Market Offices for the making of the Rate. Other parishioners went in garments of dignity; he appeared in the clothes worn in the saw mill. When the Rate was proposed he objected, but was outvoted by sound Churchmen and good Tories. The moment came when everyone present had to sign the Rate Book. The practice was to hand the book round, but the Chairman felt that an enemy was in the camp. He instructed the members present to come up one by one and sign the book. They did. Then Soulter's turn came. Every effort was made and made with success to protect the document. The rebel signed and withdrew innocently to a seat. Suddenly he sprang up grasping bottles of ink in both hands. These he poured over the book before anyone realised what was happening. He then turned over a jug of water and finally broke a quantity of glass on the pages of the book. Panic reigned. The Rate Book was ruined. The police and a doctor eventually arrived while the Borough Market porters crowded round the doors. Naturally Soulter was regarded even by some of his friends as a disorderly fanatic, but his action led to the result he looked for. Before long the Church folk agreed to raise the necessary money by a voluntary scheme and went to Parliament for powers to enable them to do so.

Truth is stranger than fiction and Mr. Soulter's book is the story of an adventurous life more thrilling than many an imaginary story. It should be read by all who are interested in South London and in the rise of democracy.

Recollections of a Labour Pioneer. F. W. Soulter. Published by T. Fisher Unwin. Price 10s. 6d.

The book can be bought from the author at 8, Oval House, Rushcroft Road, S.W.2., or from the Editor of this paper.

Guy's '89 Club.

The 28th annual dinner took place at the Hotel Cecil on Wednesday, 9th May, 1923. There were present: C. D. Edwards, M.C. (president), H. W. Beach, F. S. Brereton, C. E. Carpmael, H. W. Collier, C. A. Ensor, C. H. Fagge, W. J. Henson, M. F. Hopson, A. C. Hovenden, G. S. Hovenden, B. Instone, H. J. M. Milbank-Smith, J. Moore, H. A. Munro, F. J. Nicholls, A. A. H. Partridge, J. C. S. Peatson, B. G. Reynolds, J. Robertson, W. E. Robinson, A. Scott-Turner, H. J. Spon, F. J. Steward, H. M. Stewart, and W. Tyson. Letters and messages of regret for non-attendance were received from C. H. Bryant, R. F. Clark, L. E. V. Every-Clayton, G. L. Eastes, John Ensor, R. H. Fagge, W. S. Handley, R. H. Hayes, H. Hewetson, H. T. Hinton, J. A. Howard, W. J. Rowland, M. Aston Key, C. E. Michael, B. A. Richmond, E. T. Shorland, R. B. Stamford, E. C. Taylor, E. Rae Thomas, A. Salter, M.P., M. P. Jones, J. R. Stenhouse, W. H. Jewell, W. G. Mumford, H. B. Stoner, and J. C. V. Wilkins. The members present passed a happy evening together, and this reunion of old friends was one of the most successful meetings held. The officials elected for next year are:—President, H. A. Munro; vice-president, F. J. Nicholls; hon. secretary and treasurer, H. J. Spon, 12, Park Square West, N.W.1; deputy hon. secretary, G. S. Hovenden. A. J. Mathison and G. B. Muriel were elected members of the club, the next meeting of which will take place (D.V.) on May 14th, 1924.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The Fallacy in the Modern Treatment of Secondary Syphilis.

The modern idea would seem to be that as syphilis is due to the spirochæta pallida, and as mercury and salvarsan have the power of *getting rid of the manifestations* of secondary syphilis; therefore, mercury and salvarsan are able to kill the spirochæta pallida and cure syphilis, but this is a "non-sequitur."

As long ago as 1876 Bristowe ("The Theory and Practice of Medicine") wrote: "It is admitted now that mercury does not prevent either secondary or tertiary symptoms from coming on; but nevertheless it is certain that it has a marvellous influence in causing the removal, in turn, of the primary, secondary and tertiary lesions of the disease," and he also wrote: "The value of local applications to syphilitic lesions is undoubted."

In the same year (1876) Jonathan Hutchinson (senior) (*Lancet*, 1876, Vol. I., pages 535 and 536) pointed out with regard to syphilis that: "when allowed to develop without interference by specifics, its stages are very fairly regular." . . . "If, however, mercury be given, the course of things is wholly altered." . . . "In a case in which mercury was begun early and continued for six months, I have known the rash, which would otherwise have come within six weeks, deferrred to the end of the period named." . . . "The cases in which syphilis is transmissible by inheritance for more than a year or two after its secondary stage appear to be very exceptional."

The prolonged use of salvarsan and mercury retard the secondary stage and the patient remains a danger to others far longer than was the case when a six months' course of "grey-powder" in secondaries was considered quite sufficient.

In the treatment of secondary syphilis all idea of trying to prevent tertiaries or even further manifestations of secondaries should be given up, and an endeavour should be made to remove the lesions of the disease by the use of local remedies, such as "black-wash" for sore throat and calomel powder for condylomata, and when necessary to combat urgent symptoms mercury or salvarsan should be used, not with a view of curing syphilis by killing the spirochæta pallida, but only for getting rid of the lesions caused by the spirochæta pallida.

ROBERT S. WAINEWRIGHT, M.D.Lond.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

SIR,—Your readers may have learnt, through reading the travels of Serpa Pinto and others, of the annoyance they receive from the "attentions" of the daughters of the "chiefs" of the various tribes they pass through. It may therefore interest them to read a letter from an Assistant Magistrate in Central Africa, received recently by an old Guy's man.—Yours,

SENEX.

I am here all alone amongst blacks,
And often my spirits they vex;
When I go to collect the "hut-tax"
I have to explain to the sex—

That business is business with me:
I am not here to giggle and play;
But my culture they don't seem to see:
Go, they won't, when I say "Go away."

My blood it is colder than ice,
My feelings no warmer than snow;
Though they try to look sweet, and be nice,
Cold water I pour on the show.

These niggers are black as the grate,
And black are their hearts as their skin;
Though I judge them and settle their fate,
For their feelings I care not a pin.

I settle their hash in a trice;
My opinion they very soon know;
Though I'm conscious I'm awfully nice,
I don't want a nigger, you know.

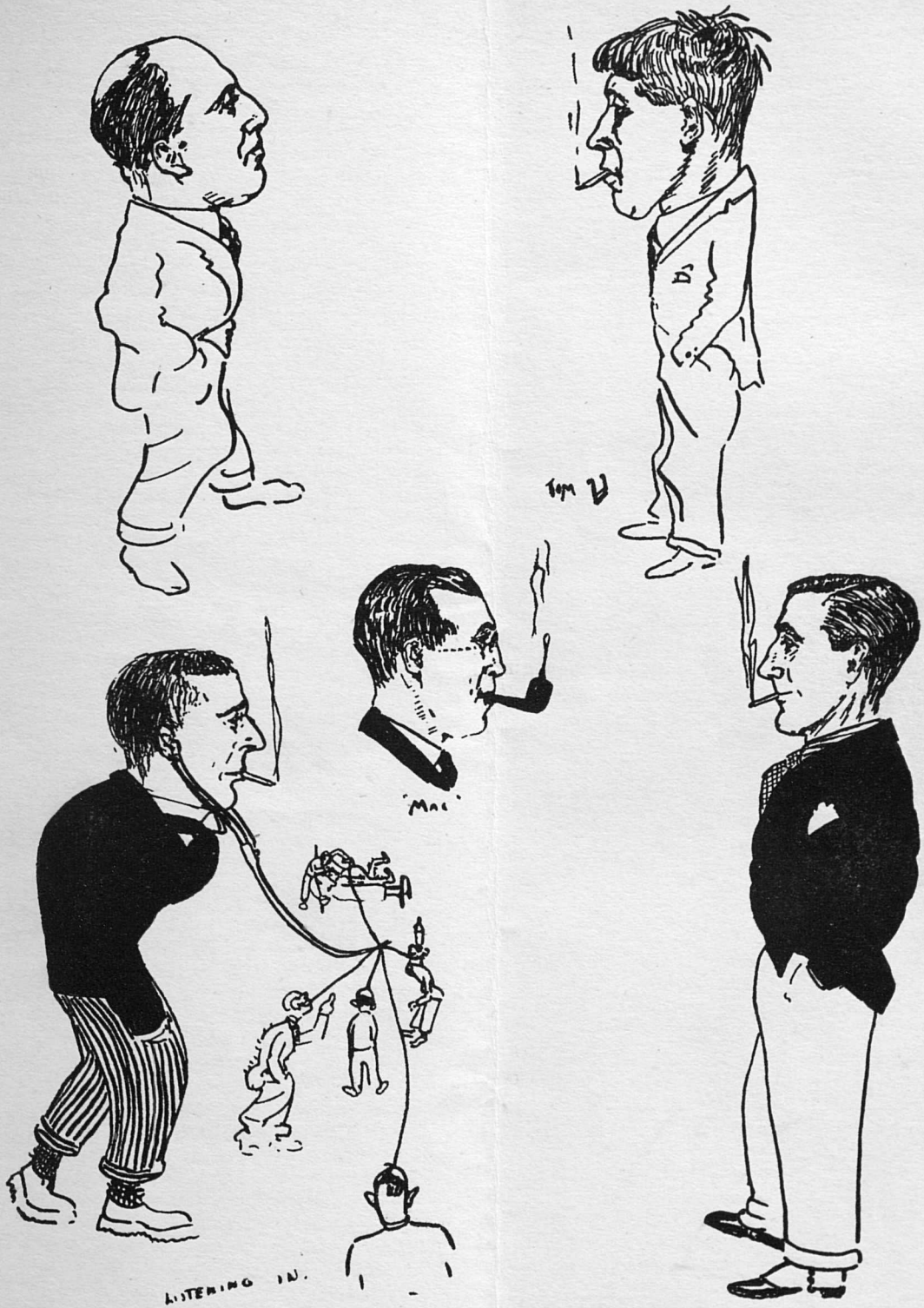
Like the nether millstone is my heart,
As a lily, my feelings are pure,
I feel I'm a man quite apart
From the rest of the world, I am sure.

With their eyes they make love all the day,
But it takes no effect upon me;
Though, as judge, I hear all that they say,
I'm a Stoic to all that I see.

I'm a Cynic outright to the core,
And a Plato in bone and in nerve,
Epicurus the man I adore,
Cold Pallas the goddess I serve.

Their complaints are all woes of the Flesh,
I am Intellect pure and refined;
Quite in vain are their wiles to enmesh
Such a spotless disciple of mind.

My blood it is colder than ice,
My feelings no warmer than snow,
Though I'm conscious I'm awfully nice,
I don't care for niggers, you know.



THE JUNIOR STAFF

(Some of Them).

By H. RICHARDS.

DEAR SIR,—A surgical ward clerk is the least likely of all the students, in their clinical period, to cavil at any encroachments upon his privileges. He is therefore an easy prey to the Anti-Waster. In the ordinary way, perhaps, a ward clerk is of slight importance to an operating firm; during "take-in," however, he is entrusted with a hundred and one minor duties, the cumulative importance of which is considerable. Most Registrars will admit that both the quality and the facility of the work done during a "take-in" depend in no small measure upon the keenness and efficiency of the ward clerks.

A year ago, and until recently, sleeping accommodation was provided at the front surgery for the A.H.S., two dressers, and one ward clerk. Another ward clerk was generally accommodated in the College, occupying the room vacated and courteously lent by the A.H.S. (whose natural courtesy it would seem must be curbed if he is to reach a post of administrational authority). Now, owing in part to the considerable cost, which must be nearly 6d. a week, of having the ward clerk's bed (still "in situ") in the front surgery prepared daily, and also to the fact that the appointment of surgical ward clerk is not "official," the relatively new practice of allowing one of the "take-in" ward clerks to sleep in the surgery is to cease.

In the present circumstances the ward clerk may not pay for the up-keep of the surgery bed, he may not sleep on the unmade bed, and he may not sleep in the surgery otherwise than in an "official" bed. He is unlikely to secure a room in the College, where also he may not sleep without a bed. He is therefore left with the almost-equally unpleasant alternatives of (1) staying at hospital until his work appears to be finished, and then finding his way to Strephon Oak in time for breakfast; or (2) obtaining the house surgeon's permission to retire in time to catch his last bus, train or tram. The strain of taking the first alternative and working for practically seven consecutive days and nights is definitely unphysiological, while the second course, apart from its suggestion of slackness, leaves the firm appreciably short-handed for night work.

Be that as it may, the economy is at present being effected slightly at the expense of the efficiency of the "take-in" firm and largely at the expense of the ward clerk, his health, his experience and his "esprit de corps." Further economies could be effected on the same principle by requiring the ward clerk to supply his own razor for preparing the patients, his own paper for writing reports, and his own trolley for underground transport. The latter economy would provide a remunerative occupation for at least one porter in the retailing, repairing and storing of trolleys for ward clerks.

DRESSER.

A Matter of Phineas and the Milk Can.

The following article is reprinted from our contemporary, *University College Hospital Magazine*:—

Speaking of Phineas reminds us that recently his adventurous spirit took him further afield. It appears that one of the provincial universities, for the amusement of the rustic community of its local village, held a masque or revel in the market place. Rustic minds are ever set on things below the surface of the earth, and it was but natural that they should go below the surface of the market square for their revel—like ever turns to like! It seems that for the elaboration of the masque a representation of an Egyptian mummy was necessary; and, naturally, Phineas being by far the most famous mascot in Great Britain, covetous eyes were instantly turned upon him. That this antiquated provincial institution should covet Phineas is merely a manifestation of the honour in which he is held and which we have made his due; that it should come and attempt to take him from us would have shown that, though antiquated, it was not degenerate; we would have joined issue with a will. But to have descended upon him with a concocted tale, and to have filched him away while we, his legitimate guardians, were absent and unknowing, appears to us to have been an action quite unworthy of our resentment. Any little Board School can come to Catesby's and do the same. King's College have done it; Guy's Hospital have done it; these rustics have done it; we can but be tolerant. It seems to us so utterly lacking in originality and feeble to a degree. Certainly we cannot be expected to exact the deserved punishment every time some insignificant provincial institution feels inclined to call at Catesby's, spin a yarn, and appropriate Phineas. If anyone really does want him he should let us know, and we are ready for a romp whenever convenient. But we cannot take any notice of hole-in-the-corner appropriations done behind our backs.

It may be added that Phineas received the honour of a "blue" from those who styled themselves his "captors"; it was of course less than his deserts; Hospital and College have made the fame of Phineas such that no honour which such as others could bestow would add anything material to his renown.

His trip to the country was not the last of the adventures of Phineas. On the day of the Hospital Rugger Cup Final certain persons came from Guy's Hospital to Catesby's, implied that they came from the College, and, though refused permission, carried off Phineas. We are perfectly sure that these people were entirely irresponsible, and that Guy's Hospital was not really connected with this

very futile proceeding. Catesby's very naturally demanded the return of their property, and Phineas was duly restored. We can quite understand Guy's men coveting Phineas; he is a far better and more potent mascot than any milk-can. And even after his return to Catesby's, still, apparently, distrusting the potency of their milk-can, they must needs dig up a crude imitation of Phineas, feeling that even an imitation of our mascot was better than their own. They paraded this at Richmond; and the inaccuracies of the Daily Press the next day were quite up to the standard which they have set for themselves. We are rather surprised to read in the Guy's Hospital GAZETTE that Catesby's appeal to the police for the restoration of the property which was filched from their door has mystified Guy's. If Guy's were to keep their milk-can standing outside the door of its original rightful owner, borrowing him for state occasions, they would not feel bound to take notice every time any irresponsible party pinched (not "captured") it without warning and without the knowledge of its legitimate protectors. We were quite able to hold Phineas at Richmond when we played Guy's in the semi-final, and they, wisely perhaps, refrained from giving us a chance at their milk-can.

Pinching Phineas from Catesby's, and then gibbering at us from a distance, reminds us of the action of the *Bandarlog,* the monkey people, the sneaking people without law and without tradition, always hoping to goad the Jungle People into taking notice of them. We never heed taunts from the Bandarlog, and do not turn our heads even when they throw sticks and stones at us. But when they pinch our Mowgli, Phineas, are not his guardians, Baloo and Bagheera Catesby, entitled to call in the help of Kaa, the Police-python?

SIR,—There has come to hand in the last few days a scrip, professing to be the chronicle of a people who dwell in the region of Gower Street. It is written in a strange "patois" of English and some stranger tongue of the jungle, and describes what seems to be an idol known as "Phineas." This apparently is the figure become known of recent years through the activities largely of Guy's students, and of others. It will be remembered that Guy's once offered such a figure on a chariot to that numerous body studying many learned subjects at the University College and Hospital. These are the people described, as will be seen, in this scrip. Placed on a chariot for greater ease in transit, the offering was made with the condition that, having been brought to the door, it had to be taken inside. The story is already known, how, after some time, the warriors issued armed to the teeth, and circled round shrieking in a strange tongue, and how the object lost the way and came to Guy's somehow. It would have stayed, but the authorities very rightly decided that the Hospital could not be littered in this way, and so it was returned to its rightful guardians, Messrs. Catesby. The scrip goes on then to describe this figure in its own language, and it would seem that Phineas is a kind of god, worshipped from afar by the people in Gower Street. This is supported by the evidence of its pre-war Scots appearance. Apparently it is coveted by many people, and has been used as a mascot by them on several occasions. The principal users, we are told, are Guy's, King's College, and an "antiquated provincial institution," the translation of which is probably Cambridge University. The god is very heavy and cannot be held with ease, but the people of Guy's use it as a comfortable seat on public occasions when rest is necessary, and the "rustics" at "one of the provincial universities" as a mummy. There is a word "pinching" in the original description, but the meaning of this is not known. There are, the writing says, other figures of this mascot, mowgli, or mummy, whose existence greatly angers the worshippers of this god, because it necessitates worship still farther off. The Phineas worshippers seem to style themselves by several names, but the Banderlog, the people without law and without tradition, is the most intelligible. I do not attempt to translate this phrase, as its well-known beauty would be impaired thereby. These Banderlog do not turn their heads when sticks and stones are thrown at them, which is another possible reason why they worship "Mowgli," which is known to have a very large and hard head. Then there follows a rather crude description of the Guy's milk-can, but the great fame of this mighty little mascot makes the transcribing easier than that of the above. The milk-can was captured in heroic fight by one member of the great Guy's people, and has been kept by them ever since against all with whom they love to battle for it. The like of it is nowhere else to be found. This mascot, by reason of its great tradition, is only to be seen on that day when Guy's has won its right to settle the holding of the cup. It is to signify that Guy's is out to win or lose on a last throw, and at long last the Guy's people have shown that whoever by their greater prowess may win the cup, none but Guy's may touch the milk-can. Thus has the glory of this mascot not been lost either on the victorious or the stricken field. This the Mowgli's people know, for although they are a gallant tribe on the football field, they have yet to have a real mascot. I hope some of your readers will be interested in this attempt to describe the recently-found savage manuscript, and remain, sir, yours etc.,

ONE OF THE AHMO.

Guy's Hospital,
May 9th.

Some Aspects of Education and Training in Relation to Mental Disorder.

The Third Maudsley Lecture

Delivered by Sir MAURICE CRAIG, C.B.E., M.A., M.D.Camb., F.R.C.P., at the Quarterly Meeting of the Medico-Psychological Association of Great Britain and Ireland, held at the County Hall, Spring Gardens, London, on Thursday, May 25th, 1922.

Reprinted by kind permission from the "Journal of Medical Science," July, 1922.

We are met to fulfil the behest of one of the most distinguished physicians of psychological medicine of recent times. Maudsley was a leader in his lifetime, and he lit a lamp of research which it is our duty and that of the generations which follow after to keep burning. He was a man with a great insight and practical withal, for he has left behind him benefactions which are endowed by his inspiration and which must live with increasing benefit to mankind. The acuteness of Maudsley's vision is demonstrated by the method in which he founded these lectures; he perceived, and perceived rightly, that mental disorder was not purely a medical problem, but that there was a lay side to it which was of vital importance, and in consequence he directed that in alternate years a scientific and a popular lecture should be given. He wrote that "there are not many natures predisposed to insanity but might be saved from it were they placed in their earliest days in exactly those circumstances and subjected to exactly that training most fitted to counteract that innate infirmity." No doubt this connotes much, and to some it may seem an overwhelming task. For it would appear to include a full appreciation of how mental disorder is brought about; what, if any, are the precursory indications, and what symptoms, when present, should be regarded as potentially dangerous to the future welfare of the mind of an individual. The inquiry is a fascinating one, and the problem can be more quickly unravelled by the working of physician, psychologist and educationalist in close collaboration. Mental disorder unfortunately, as things are at present, only becomes a medical matter when it has advanced a considerable distance, but this must be changed, and it must be our endeavour as physicians to control its very beginnings. Whilst it is right to devote time and energy to examine scientifically every means by which the recovery or the alleviation of mental disorder may be brought about and to use them to the full, in the end the return for these labours must be limited; to control its gateways and to prevent its occurrence far out-rivals any treatment of disorder that has once become established. In fact it is doubtful whether a complete recovery ever does take place in the sense that the patient is free from any scarring from the experience he has passed through. Preventive medicine is the side of medical science which is most attractive, offering as it does benefits of infinite value both to the individual and to the nation. Investigation tends more and more to establish the view that many disorders have their inception in childhood and experience confirms that this is true of the more common types of mental disturbance. It is on this account that I have decided to take as my subject for this lecture "Some Aspects of Education and Training in Relation to Mental Disorder." The term "education" will be used in its widest sense and will connote the instruction and upbringing of the child both at home and in the school.

Controversy has always centred round the question whether mental disorder is in the main psychogenetic or physicogenetic, and each theory has its able exponents. Experience has satisfied me that there is truth in both views and that it is unwise to disregard the potentialities of either of them. No doubt there is a mental instability in the majority of those who develop psychoneuroses or psychoses, but lowered physical health may be the final determining cause of the breakdown, and I would go even further and suggest that in many of these cases, had the bodily health remained satisfactory, no serious nervous disturbance would have occurred. We cannot separate mental and physical processes, and it would seem unwise to attempt to do so when we appreciate how strong is the evidence of the interaction which takes place between them. Therefore, in the theme before us it will be necessary to consider the child as a whole and to give due heed to both its physical and mental development. To regard it otherwise is to fall into the error too frequently encountered which not uncommonly results in

faulty diagnosis. Further, let me predicate that the infant referred to in this thesis is the apparently normal, and not one who would suggest mental enfeeblement from birth.

It is not my intention to discuss the laws of inheritance further than to remind my hearers that, though the child tends to inherit the attributes of its parents, fortunately it is nothing more than a tendency, and to be forewarned is to be forearmed, and the knowledge of any weakness can and should be used to the benefit of the child. To ignore the possibility of any known weakness developing is to court disaster, whereas to appreciate it and to take steps to lessen its influence will in many instances repay the effort which has been expended.

Our first step must be to consider if there are any mental factors whose presence is conducive to the development of mental disorder. As I am addressing an audience largely consisting of laymen, I must tell you that there are types of insanity which, like some physical diseases, are intrinsically part of the organism, and for which, with our present knowledge, little can be done either to prevent or to remedy. Fortunately these form by far the smaller group, whereas the larger includes the many which result from nerve exhaustion and emotional states. Therefore it must be to the latter that attention should be first directed on account both of the number of cases and of the greater possibility of prophylactic measures.

Maudsley writes: "Insanities are not really so different from sanities that they need a new and special language to describe them, nor are they so separated from other nervous disorders by lines of demarcation as to render it wise to distinguish every feature of them by a special technical nomenclature. The effect of such a procedure can hardly fail to be to make artificial distinctions where divisions exist not in nature, and thus to set up barriers to true observation and inference." It is these artificial barriers that have in the past so encumbered the way of progress. When one appreciates that in a given individual nothing more than exaggerated and uncontrolled normal characteristics may constitute mental disorder, we realise how narrow is the margin between those whom we call the sane and the insane.

Mental evolution should take place in a definite order and within certain recognised periods and any delay should be noted, but even more important is it to watch for any regressive symptoms which may indicate a failure or a dropping back to an earlier phase in the child's life-history. Unless the observer has a keen perception, he will usually miss the beginning of any regression and in this way lose valuable time. Neither must he permit himself to fall into the common error of explaining away all mental changes as matters of no importance. Symptoms may be positive in the form of some new and unwonted mental characteristic, or they may be rather of the negative type, including conditions such as apathy, inattention and the like; they are often protective in purpose, being an effort on the part of the organism to defend itself from any undue stress.

When one reviews a large number of patients who are suffering from nerve exhaustion in varying degrees, there is one symptom which appears early and which stands out in strong relief, and that is hyper-sensitivity. This state is observable not only as a physical sign in the nervous system demonstrable by various tests, but it is a condition which also affects the mental processes. It is to me the symptom of all symptoms which gives rise to many others which in time may so disturb personality as to occasion definite unsoundness of mind. Here we have a symptom which is common to many children, but which in some, by its ever-widening embrace, slowly but surely undermines the whole mental fabric. It leads to unhealthy emotion, to pre-occupation, and to false reasoning; it heightens introspection, and by its presence it aggravates all the normal characteristics of the individual; it disturbs the relationship of self to surroundings, and with this failure of adaptation a sense of inferiority or of irritation may result. It will be appreciated how baneful this hypersensitivity may become, and how by its intensity or by its duration it may injure the mental life of the individual. Nature has its own way of lessening the trying effects of heightened sensitivity, and the recording of acute sensation may suddenly cease and its place be taken by a psychical anæthesia in which mind may become a blank or in some other way become disordered. Now if hypersensitivity can do all this, it behoves us to treat its advent with an appreciative recognition, and to bring all our knowledge to bear in an endeavour to defeat its progress. We must discover, if possible, how and why it arises, and then the

conditions which favour its development, and lastly how it may be remedied or at least mitigated.

Some children are naturally hypersensitive, whereas with others it is acquired. Over-stimulation is probably its most common cause in childhood, and this may be effected in many ways. Some children become over-excited by parties or by passing their days in unsuitable surroundings, and the harm that is being done may declare itself in irritability, querulence, gastric upsets, or disturbed sleep. The naturally quick child is more liable to become over-stimulated than the dull one, and its ease of learning delights both the parent and the teacher in instructing it. The early ability to read has an undoubted danger attached to it, for once it can do this the regulating of the time spent in the study of books can only be carried out with co-operation of the child. During the early school days the danger of over-stimulation increases, and the brilliant boy develops a new and legitimate ambition to outstrip his schoolfellows in knowledge. The result of this may be a scholarship, and from then onwards his course is fixed, and he must live up to his acquired standard, not infrequently without consideration of the injurious effect that close concentration is having upon his mental and physical health. Now it must be borne in mind that brain exhaustion is often of slow development and that it may not declare itself until school-days are over, and the mental failure may be in varying degrees of severity. Some authorities hold that the real blame for the competitive system largely rests with the Universities, for these seats of learning are the goal for which the boy strives and for which the parent and the master prepare the way. I cannot do better than quote Dr. Herbert B. Gray, late Headmaster of Bradfield College, who writes in his book on *The Public Schools and the Empire* the following weighty words: "Most physiologists would admit that the mere fact of such competition at such an early age involves a strain more or less harmful in after-life. Apart from the unnatural stimulus of the mental powers, there is the excitement of the premature competition, which is opposed to all sound biological principles. Physiology contends that over-strain in mental efforts hastens the period of adolescence, whereas the more highly organised the creature, the slower is he, or he ought to be, in coming to completed growth. Scientific investigations have in fact proved that the delicate mechanism of brain structure forbids such premature efforts of brain evolution. Inductive reasoning tells the same tale. The writer has been in close touch as boy and master with public schools for forty-five years. He is, therefore, familiar with many life-histories, and is at least not 'entirely ignorant of the subject.' At some of the famous schools where scholarships are most valuable, and therefore most eagerly sought after, statistics go to show that winners of such prizes have in a large proportion of instances 'tailed off' either in the stage of early adolescence or soon afterwards. The brain in all these cases is proved to have produced premature results by early forcing. Some boys have shown no lasting power after two years of continued competition at their public school; others of less delicate brain organisation or otherwise more bountifully nourished 'stay' till half-way through their University course; while others of still stouter mould do not begin to fail in power until they enter the competition of outer life: but only a comparatively small percentage fulfil the promise of their earlier years. The mental growth has become stunted and shrivelled; the plant atrophies, and if it brings forth fruit, it brings forth no fruit to perfection in the maturer years. It is a wasted life." I have quoted Dr. Gray fully on this matter, as his evidence is of the greatest importance, coming as it does from a man of long and wide school experience. Now what is true of the brilliant boy is true in a relative degree of others whose lessened physical stamina renders them more liable to over-stimulation: defective circulation, respiratory disorders and zymotic disease all accentuate the danger, and any one of these may be the determining factor in bringing about the collapse of an already over-strained nervous system. Further, if in addition to work the brilliant boy is also successful in games, his risks of breaking down are correspondingly increased. We are apt to forget that it is the same nervous system which serves both mind and body, and first to overstimulate it on one side and then on the other is to court disaster. I have known not a few child prodigies who have excelled in games and who have in consequence deteriorated mentally before the age of twenty. Physical fatigue may be damaging in several ways, but one of the most important is violent exercise occurring in a comparatively short space

of time. I can recall the case of a young girl who developed an exhaustion delirium after running in a paper-chase and who remained in a confused state for several months. I need hardly remind my hearers that such a delirium is almost certain to leave behind it a lowered nervous resistance for very many years. Children who are about to take part in any severe test of endurance should be inspected beforehand, and any who for either physical or other reasons are below their usual health standard should be debarred from the contest together with those who are constitutionally frail. The spirit of many a child far exceeds its power of physical endurance, and this high spirit may be raised even further by a powerful herd instinct which calls for an unusual effort for the good name of some school house or other school division. Further, apart from the actual physical strain, there are some forms of sport which in some young persons lead to an extreme bracing up of nervous tension. Anyone may observe this in the trembling of the muscles of the young aspirant to athletic success; of course, this is in itself not harmful but even beneficial when such effort is kept within limits, but over-stimulation of the kind may be very damaging if by prolonged effort the nervous energies are over-taxed, or if even a moderate strain is placed upon a physically or nervously reduced child.

Time will not permit me to make an exhaustive inquiry into the various circumstances which give rise to hypersensitivity, for the causes are numerous, including as they do physical diseases and disorders, defective sleep, and the over-action of various mind processes. On the other hand its existence is easy of discernment, and its influence on the growing organism should not be overlooked. I am fully aware that there will be critics who will point to the mental hospitals which draw their patients from the country village and say that these cannot be the victims of over-stimulation. But surely this is no answer, for the problem of mental disorder in the town is not necessarily that of the country and we find conditions in the rural districts which are rare in the urban. Intermarriage with all its degenerating influences is rife in villages compared with cities, and also a narrowed life has a deteriorating influence of its own.

Failure of power to concentrate attention is quite one of the earliest symptoms of over-stimulation and exhaustion, and the symptom should be quickly discernible in the child. Attention is one of the attributes of normal mind which appears when the normal child reaches a certain age, and if it fails to develop, the faculty for acquiring knowledge is correspondingly diminished, the totally inattentive child being uneducable. On the other hand, if the capacity to attend has once been acquired, to lose it indicates a regression and its import must not be lost sight of. Nevertheless the loss of power of concentration is of value as a means of protecting the nervous system from mental work which might be harmful to it. Unfortunately this symptom rarely secures the recognition it demands, and it is this failure to observe and understand that leads to the development of more serious disorder in later life.

Again, as over-stimulation may in time give rise to inertness, it is necessary to refer to laziness. Owing to the untrained outlook of the lay mind, mental attitudes are apt to be classified in one category without any distinction as to how and why that attitude has come about. "A lazy child is a lazy child," and too often that ends the investigation, and having reached this verdict the sentence is passed in due course. But laziness is a proper mental reaction to a definite debilitated state of mind, and to ignore it or to punish for it would be considered little removed from cruelty if the real circumstances were known. To appreciate the pathological significance of laziness it is only necessary to read the term reports of a number of school-children and to note how frequently we read that this child and that has shown indifference and inattention to his studies during the latter part of the term, and for this he comes in for condemnation. Yet in many cases the condemnation, if any is to be allotted, should be on the writer of this report for his lack of insight and knowledge of mind and its working. In support of my statement I will again quote Dr. Herbert Gray, who writes: "Every schoolmaster knows that the most reproductive work of the term is done during the first half of it, and that both masters and industrious boys 'tail off' in energy about the ninth week through sheer brain-fag." That this is true there is ample evidence, but that it should be permitted to continue is less easy to understand. It cannot be argued that "brain fag" is a benign state even in the adult, but to produce it in the

plastic nervous system of the growing child is little short of culpable, and to prevent it must lessen the incidence of nervous and mental disturbances. When laziness is to be observed, search for any legitimate causes that may be giving rise to it, and only find fault or punish when these have been eliminated. It is, unfortunately, more common to condemn first, and only when correction has failed to produce the desired results, to investigate in other directions. To follow such a course not only increases the mental damage to the child, but it injures personality by establishing a sense of inferiority in the good and a callous indifference in the bad.

As defective sleep is a common cause of the development of hypersensitivity, it will be well to consider it before we leave this subject. All living organisms require proper time for repose, and it is safer to permit of a longer rather than a shorter one, especially during the early and growing years of childhood. The child should be trained to sleep during the day if possible until it reaches the age of five, and to neglect this part of the training not infrequently permits of too rapid development which brings with it restlessness and over-stimulation. Children up to the age of sixteen should have at least ten hours' sleep and from sixteen to twenty, nine hours should be allotted for rest. When considering sleep it is necessary to give weight to the quality as well as the quantity. A restless sleep full of dreams and broken by nightmares is unrefreshing and indicates an unsatisfactory condition of health, and the child who persistently exhibits such symptoms is not in a fit state for the ordinary work of school. The nervously over-stimulated child fails to sleep, and when this happens it indicates that the organic side of life is being disturbed, and this will shortly declare itself in loss of body-weight and other symptoms if steps are not taken to correct it. Again, sleep is rhythmic, and it can easily be broken by interrupting the rhythmic habit by evening dances, theatres and the like. There is little doubt that some parents permit of serious damage to their children by giving them this type of pleasure. Broken sleep is not easily re-established, and even at best once it has been disturbed in this way it is easy to relapse into a sleepless state again. Evening school preparation work has always seemed to me to be of doubtful value, and it is definitely harmful to some children. The work before retiring to bed should be of the lightest, and probably in time we shall see with advantage the hours after tea being devoted to light lectures or instructive games. Some schools are open to criticism for the way that the younger boys are disturbed by the older ones as they go to bed at a later hour. The nervous apparatus for hearing must always be active and alert, as it is largely on this special sense that the sleeping person relies for warning of impendiing danger. If you doubt this, watch the restless movements that are produced in a sleeping infant by sudden sounds, and these movements are the translation of sensation into action. Some children are definitely awakened, others merely disdisturbed, by sound, but practically all must be affected by it. Further, sudden noises not only awaken but startle some persons—this is known to all anæsthetists—and the disturbance created may not quickly subside. Therefore this matter is of practical importance and cannot be brushed aside as a frivolous observation. For a time some children, like some adults, do not appear to suffer from defective or deficient sleep, but because there is no gross objective sign it does not necessarily follow that deterioration is not taking place, and experience teaches that it is the wiser course to treat the condition seriously rather than to venture a hazard that all will be well. Broken sleep of short standing can easily be remedied, but if once established it is a far more difficult proposition.

(To be continued).

Reviews.

Guy's Hospital Reports. Vol. 3. Fourth series. No. 2.

The second of the quarterly numbers of this year's volume of the Hospital Reports is now ready. Sir Charles Symonds has contributed a memoir of the late Sir Frederick Taylor, two further articles on occult blood in the fæces are published, and Dr. Nicholson continues his studies on tumour formation. Especially interesting are the two articles by Dr. Symonds and Dr. Harvey Cushing, of Harvard University, on the clinical study of intra-cranial aneurysms. These aneurysms occur more often than is generally recognised, and their comparative frequency was first noticed by Sir William Gull in the volume of these Reports for 1859. There are commentaries on two cases of Addison's anæmia, which have lately been in the hospital wards, an

article on urotropia as a biliary antiseptic, observations on the acidosis factor in pregnancy and in nephritis, and an account of the etiology and treatment of varicose veins. The number fully maintains the high standard of interest and information of its predecessors.

Anæsthetics and their Administration. By the late Sir Frederick W. Hewitt, M.V.O., M.A., M.D. Fifth edition edited by Henry Robinson, M.A., M.D., B.Ch. (Oxford Medical Publications.) Price 30s. net.

This is an admirable manual for all who are interested in the administration of anæsthetics. The whole subject is dealt with exhaustively, yet the beginner is not likely to be bewildered by the range of choice in anæsthetics which is presented, since the best methods of anæsthetisation are indicated pretty definitely for any given type of case. The book deals not only with the practical aspect of the subject, but also with the history and physiology of anæsthesia, in a thoroughly satisfactory manner. After the first four chapters, which are devoted to the history, chemistry and physiology of anæsthesia, this volume presents a competent account of the administration of those anæsthetics which experience has proved to be most useful, mentioning the less admirable methods only to point out their disadvantages. The selection of anæsthetics, sequences and methods in particular cases is dealt with in detail, and a chapter is devoted to the administration of each of the most important anæsthetics.

Local and spinal anæsthesia receive full consideration. The concluding chapter deals with the medico-legal aspects of surgical anæsthesia.

The type and illustrations are good, and there is an efficient index.

The art of anæsthetising is perhaps that which the student, in the course of his hospital career, finds it most difficult to acquire. In the whole of his course, he finds that he has but one month, or at most two, in which he can acquire experience. Later on, while acting as house-officer, he is called upon to give anæsthetics constantly, and to assume responsibility for any of the many accidents which may occur to patients whom he is anæsthetising. While any high degree of skill as an anæsthetist can, of course, only be attained by practice, such practice may with advantage be supplemented by judicious reading.

This book may be recommended not only as a valuable addition to the library of the experienced anæsthetist, but also as a useful work of reference for the junior man.

The British Nurse in Peace and War. By Elizabeth S. Haldane, C.H., LL.D. (John Murray, Albermarle Street, W.) 1923. 7s. net.

In the Guy's GAZETTE of 12th [illegible], 1923, "Senex" writes appreciatively of the modern nurse and draws attention to the fact that in all advance in surgical art and medical science intelligent and skilled nursing plays an equally important and integral part, and he contrasts the days when that "inwallable person," Mrs. Gamp, from the depths of her unconscious ignorance, must have added considerably to the appallingly high death rate. To those who are interested in the evolution of nursing and its future, and urgently desired developments, Miss Haldane's recently published book may be strongly recommended. The history of nursing is briefly traced from ancient Greece and Rome, and mention is made of some great Eastern Hospitals at Bagdad, Damascus and Cairo, leading to a fuller account of the conception of compassion that proceeded from the Christian Faith and the establishment of religious orders and associations with their customs of hospitality and service to the sick and poor. Three most instructive chapters deal with the almost incredible conditions of the nursing service as revealed in the histories of St. Bartholomew's Hospital, the London Hospital, and the Edinburgh Royal Infirmary.

From the latter part of the seventeenth century to the middle of the nineteenth were dark days indeed for nursing, but great and momentous changes came through the insight and spiritual force of certain men and women, both in our own country and Germany, and a new era dawned. Miss Haldane warns us that we must not rest contented with the high place that the British system of nursing has won for itself and the proved efficiency of our nurses in dealing with the sick, and she would suggest that in facing the new problems of to-day our hospital system must take account of the social order, and the nurses' outlook and education must be wider. In America the public health nurse has become a great national asset, and there are combined educative courses at the universities and hospitals for five years to equip her for social service and administrative and teaching posts in hospitals.

Unfortunately in England at the present time the pay of the health visitor is so very poor that it is difficult to see the practicability of pressing for a lengthy and high standard of education with no prospects of adequate financial return.

It is good to note that the general scheme of training for the State examinations will employ more nurse-teachers, and in this the Preliminary Training Schools and the Sister Tutors have led the way, but America can certainly claim to offer better post-graduate facilities than we do. This may be a development of the College of Nursing.

The second part of the book deals with the Army nurse during the war, and Miss Haldane acknow-

ledges official help for facts and figures. It is a simple account of a great achievement and will be invaluable as history.

It is disappointing to find that only a few pages are devoted to present-day nursing organisation, including the establishment of General Nursing Councils to administer the Nurses' Registration Act of 1919. The College of Nursing is noticed as having done great things for the profession and with a future before it, but no explanation is given of its success in numbers and accomplishment. The present writer would see that it has come through the combined efforts of *all* concerned in the corporate hospital life: managers and administrators, medical men and laymen with valuable experience, the trained nurse in whichever branch of the service she has entered, and the matron who can also claim to represent in the probationer, the on-coming nurse and (this point is often overlooked) what she will ask of the future.

Without this combination could any nurse society have drawn up and obtained response to the "Suggested Salaries Paper," or the Superannuation Scheme, or secured the release of nurses from payments to the Unemployment Insurance Act? "Senex" has cheered us on our way, but we have far to travel before we shall arrive.

To quote in closing from Miss Haldane's apologia for her book: " . . . there is the sense that the nurse has chosen a noble calling, and it is inferred that the follower of it has the good of humanity at heart. The layman can appraise her as a national asset and can best point out where and how she should be used. Those of her own profession are too near the footlights."

Specialities.

"THERMOGENE."

The THERMOGENE CO., LTD., Haywards Heath, Sussex.

The value of this well-known Medicated Wool Preparation in cases of Rheumatism, Gout, Sciatica and kindred complaints, has been acknowledged now for many years past, and we are glad to learn, therefore, that "THERMOGENE" is in wider demand than ever before.

An important point in favour of its use is, that its application is one which, in contra-distinction to stimulating ointments, does not clog the pores of the skin, but allows free air passage to the affected parts.

The Company has recently largely improved and extended their works, and fitted them throughout with new and up-to-date Machinery, so as to manufacture "THERMOGENE" in its most perfect form.

Pass List.

Royal College of Surgeons.
L.D.S.
First Professional Examination.

APRIL, 1923.

PART I.

Mechanical Dentistry.

G. Evans.
H. A. Gillett.
H. F. Boosey.
R. V. Bradlaw.
L. Cowlishaw.
H. J. Daneel.
R. H. Hancock.
E. M. Harries.
N. Harris.
H. C. L. Maister.
F. D. Manners.
W. H. Meissner.
W. D. Pitt-Payne.
C. M. Veysey.
J. F. Wege.

PART II.

Dental Metallurgy.

G. Evans.
H. A. Gillett.
I. A. Barlow.
M. Farwell.
R. C. Lilycrop.
C. E. Long
E. B. Rees.
S. Thomson.
L. Walters.
V. W. L. Wells.

PART III. (a).

Anatomy and Physiology.

E. M. Harries.
H. C. L. Maister.
E. B. Rees.
S. Thomson.
L. Walters.
N. Parkinson.
E. J. Andreka.
N. J. Boulton.
W. G. Bradbeer.
E. J. Clothier.
G. W. Dibble.
G. G. Exner.
G. M. Glennie.
W. E. Herbert.
D. A. James.
H. B. Kidner.
F. T. Lowein.
A. E. Maclagan.
J. G. Nelson.
V. N. Percival.
W. Rowland-Hill.
C. L. Steyn.
A. Perkins.
W. L. Benson.
A. T. Brimmer.
R. G. C. Broadbridge.
A. E. Cave.
P. S. Clarence.
E. Crocker.
D. Davies.
R. L. Denny.
C. H. Edney.
S. Eidinow.
J. W. Finnemore.
G. W. Gathergood.
R. R. Haddow.
W. L. Head.
A. C. Kempe.
I. Lipschitz.
S. A. McLaren.
L. G. Pickett.
H. W. Pimm.
F. St. J. Powley.
L. F. O. Seymour.
G. F. Swales.
F. H. B. Tofts.
A. E. Treeweek.
W. F. C. Tucker.
de W. Vorster.
G. V. L. Williams.
W. H. Meissner.

PART III. (b).

Dental Anatomy and Physiology.

E. J. Andreka.
N. J. Boulton.
W. G. Bradbeer.
G. W. Dibble.
G. G. Exner.
F. H. Goddard.
S. W. Goodson.
M. B. Goolding.
M. C. Hart.
R. M. Hastings.

W. E. Herbert.
H. B. Kidner.
A. E. Maclagan.
V. N. Percival.
W. P. Beresford.
W. E. Berwick.
F. F. Brayfield.
P. Droomer.
P. J. du Toit.
A. Hirschberg.
A. F. King.
G. B. Longhurst.
A. D. Miller.
K. F. Pedley.
G. G. T. Tregarthen.
T. Vallange.
H. P. R. Williams.

Water Polo Chats.

It is convenient to deal, firstly, with the various methods of throwing the ball; subsequently some attempt will be made to describe the functions of the players in their respective positions.

The "floating shot" is the most generally useful throw, and, although of greatest value to the back and half-back, is of great help to the forward, especially when a pass falls short. It consists merely of turning completely on to the back, lifting the ball on the opened palm, behind the head, and "lobbing" it upfield. When the ball is thrown over the player's head in the direction of his own goal, he swims towards it, his particular opponent in hot pursuit. On reaching the ball he places his hand under it, rolls on to his back, and clears. Should his opponent attempt to "duck" him, he must start at his feet and work up, giving the player ample time to clear the ball.

The "sling shot"—very pretty at practice, but of little use to a well-marked forward—consists of stretching the left arm on the surface in the direction of the objective, with the body in the vertical position, grasping the ball firmly between the right palm, fingers outstretched, and the forearm, drawing it back smartly to the arm's full extent, and slinging it forwards over the head, with a circular movement. The "snag" in play is the drawing back, as it gives one's opponent an opportunity of grabbing the arm.

The "weight-putting shot" is of use to a forward when he is in a good position in front of goal, but too well-marked to use the "sling." It consists of lifting the ball on the palm, wrist bent back, and "putting" rather than throwing it at goal, as in "putting the weight." For this shot also the body is vertical in the water.

Of the "back-flip"—Mecca of the novice!—anon. It comes only with constant practice, and each develops it after his own fashion.

Appointment.

E. D. Scott, M.D., M.R.C.P., Assistant Physician to the Royal Sussex County Hospital.

Notices.

Junior Guyite Club.

The thirty-seventh dinner of the Junior Guyite Club was held at the Restaurant Frascati on Thursday, May 17th. The following members were present:—P. N. Randall (president), E. W. Goodall (vice-president), J. A. Fraser (hon. secretary), F. F. Burghard, J. W. H. Eyre, J. B. Howell, T. B. Layton, M. Parry-Jones, S. E. Pratt, A. E. Price, C. E. Price, R. M. H. Randell, J. A. Ryle, A. R. Thompson, A. M. Zamora, H. G. Ashwell, T. Brown, R. R. W. Oram, H. B. Marriott, H. H. Du Boulay, J. G. P. Phillips, and five guests.

The following members had accepted but were unable to be present:—H. E. Consell, G. W. Goodhart, and W. J. D. Smyth.

The following new members were elected:—Frank Cook, E. MacMahon Mahon, Alan H. Todd, and C. H. C. Toussaint. The toasts of the King, Guy's Hospital, and the Junior Guyite Club, were duly honoured.

The members, on the conclusion of a sumptuous repast, were entertained by a most enjoyable concert provided by Mr. Stundale Bennett, at the kind request of Dr. J. G. P. Phillips, and, on the proposal of the Chairman, the meeting passed a hearty vote of thanks to Mr. Bennett and his fellow artistes.

The next dinner is to be held at the Restaurant Frascati in May, 1924. President: Dr. E. W. Goodall; vice-president, C. H. Fagge, Esq., M.S., F.R.C.S.

Clinical Lectures and Demonstrations.

Operative Surgery.—Mr. Turner—Mondays at 4.15 p.m.; Wednesdays at 9.30 p.m.

Surgery (Revision).—Mr. Turner—Tuesdays at 12 in Classroom 3; Wednesdays at 12 in Classroom 3; Saturdays at 9.30 in Gordon Museum.

Medicine (Revision).—Dr. Marshall—Mondays at 2 p.m.; Fridays at 5.30 p.m.

Forensic Medicine.—Mr. Ryffel—Tuesdays at 4.30 in Physiology Theatre.

Lunacy.—Sir Maurice Craig—Lectures on Fridays at 9.30 in Physiological Theatre.

Demonstrations at Royal Bethlehem Hospital on Tuesdays, May 29th, June 12th, June 26th, and Thursdays, June 7th and 21st.

Change of Address.

H. J. Spon, M.R.C.S., L.R.C.P., D.P.H., 12, Park Square West, Regent's Park, N.W.1. 'Phone: Langham 1780.

P. H. Ward, M.R.C.S., L.R.C.P., Livingstone, N. Rhodesia, Africa.

Guy's Hospital Rugby Football Club. Season 1922-3.

Summary.

Date	Opponents	For			Ground	Against			Scorers.	
		Tries	Goals	Points		Tries	Goals	Points	Tries in Roman Type.	Goals in Italic Type.
1922										
Sept. 16	*Catford Bridge*	1	2	13	A	—	—	0	Steyn, Albertijn, Schalkwijk	*Schalkwijk, Neser.*
„ 23	*Coventry*	2	2	16	A	1	—	3	Steyn, Mostert, Taylor, Scholefield.	*Schalkwijk 2.*
„ 30	*Old Leysians*	5	8	55	H	—	—	0	Bekker, Taylor, Harvey, Holloway, Duncan, Sprong 4, Steyn 2, Albertijn, Hutchinson.	*Schalkwijk 7, Badenhorst 1.*
Oct. 7	*United Services*	2	2	16	H	1	—	3	Schalkwijk, Mostert, Bekker, Hutchinson.	*Badenhorst, Schalkwijk.*
„ 9	*Birkenhead Park* ...	2	2*	12	H	1	—	3	Fellows-Smith, Hirshberg.	*Neser 2**
„ 14	Gloucester	—	—	0	A	2	2	16	—	—
„ 21	Bristol	1	2*	11	A	1	2	13	Hirshberg, Bekker.	*Neser,* Schalkwijk.*
„ 28	*Harlequins*	—	2	10	H	—	1	5	Scholefield, Albertijn.	*Steyn 2.*
Nov. 4	*Blackheath*	2	—	6	H	—	—	0	Sprong, Fouraker.	—
„ 11	*Coventry*	2	2†	12	H	1*	—	4	Steyn, Taylor.	*Albertijn 2.**
„ 15	Cambridge University	1	—	3	A	1	2	13	Albertijn.	—
„ 18	London Scottish ...	1	—	3	A	1	2* 3	16	Steyn.	—
„ 25	*London Welsh*	—	1* 1† 4	17	H	—	1	5	Fellows-Smith, Neser.	*Schalkwijk 2, Albertijn* Neser†*
„ 29	Oxford University ...	—	—	0	A	1	2	13	—	—
Dec. 2	Swansea	1	—	3	H	2	—	6	Finnemore.	—
„ 9	*Old Alleynians*	1	2	13	A	2	—	6	Williams, Fellows-Smith Neser.	*Schalkwijk Badenhorst.*
„ 13	*United Services*	1	1	8	A	—	1	5	Albertijn 2.	*Albertijn.*
„ 16	Cardiff	1	—	3	A	—	4	20	Albertijn.	—
„ 23	Christmas :—	—	—	—	—	—	—	—	—	—
„ 25	Stade *Francais*	1	—	3	A	1	—	3	Cameron.	—
„ 27	Stade *Poiteain*	2	—	6	A	2	—	6	Fellows-Smith, Scholefield.	—
1923										
Jan. 6	*Old Merchant Taylors*	2	3†	20	A	—	1	3	Steyn, Finnemore, Hutchinson, Sprong.	*Schalkwijk, Albertijn† Neser.*
„ 10	*Royal Air Force* ...	2	3	21	H	—	—	0	Albertijn 3, Taylor, Schalkwijk.	*Neser, Schalkwijk 2.*
„ 13	Bristol	—	—	0	H	—	—	0	—	—
„ 27	*Gloucester*	2	0	6	H	1	—	3	Steyn, Schalkwijk.	—
Feb. 3	Aberavon	—	1*	3	H	1	—	3	—	*Neser 1**
„ 10	*Devonport Services* ...	3	—	9	A	1	—	3	Steyn 2, Schalkwijk.	—
„ 17	*Old Blues*	5	1	20	H	2	—	0	Finnemore, Steyn, Mostert, Cameron.	*Schalkwijk.*
„ 22	*University College (Hospital Cup Semi-Final)*	4	3	27	N	—	—	0	Steyn 4, Mostert 2, Schalkwijk.	*Schalkwijk 2.*
„ 24	Plymouth Albion ...	—	—	0	H	1	1	8	—	—
Mar. 3	*Birkenhead Park* ...	2	3*	19	A	—	—	0	Steyn 3, Albertijn.	*1* Neser 3.*
„ 15	"*Bart's*" *(Hospital Cup Final)*	1	—	3	N	—	—	0	Bekker.	—
„ 24	Swansea	—	1	5	A	5	4	35	Meissner.	*Meissner.*

Matches Won (in Italics) Drawn (half Italic) Lost (in Roman).

* Indicates penalty. † Indicates dropped.

RESUME 1922—23.

This season was commenced with the prospect of losing six forwards, two halves, and one centre-three-quarters, all men who have assisted the hospital during the past three brilliant years experienced under the captaincy of W. D. Doherty. Unfortunately a rather larger number of men were injured than the previous year, and many were prevented by exams. and other reasons from playing regularly, with the result that the numerous players of promise revealed by the trial matches have gained experience of first class rugby, and it is no longer necessary to worry about what will happen next season, and it will certainly be unnecessary to include nine of this year's "A" XV. Thus the annoying spectacle of seeing often four or five reserves and occasionally eight or nine players for the Hospital, and the loss of such men as R. F. H. Duncan, F. J. Biddle, and E. L. Sprong, is in all probability the best thing that could have happened for Hospital rugger in the long run. Thus next season's team will consist of a nucleus of the old-stagers, backed up by enthusiastic younger men who have had valuable experience of first class rugby this season, not forgetting the possibility of some new arrivals at the Hospital.

The outstanding feature of the season has been the success of the junior teams, in spite of the continual alterations in these sides, necessitated by all-round promotion to fill the gaps already mentioned in the First XV.; and it must be remembered that these teams also had casualties, examinations, and other reasons to contend with in addition. This success is largely due to the willingness of wing threes to play centre, and other men being always ready to try their hand in any position that fell vacant. In spite of their efforts, however, the club's greatest need is for centre threes and outside halves. On one occasion six teams took the field.

Gloucester were the first to defeat the Hospital: whilst Bristol, the Universities, Swansea, Cardiff and Plymouth Albion were all successful in their games with us. Gloucester, however, were beaten in the return match, and that with Bristol was a draw.

Birkenhead Park was included in the fixtures for the first time, and everyone greatly enjoyed these two very sporting matches with the great northern side, and hope for more fixtures with teams of this type. Of the London clubs, which included Blackheath, Harlequins, Old Leysians, Old Alleynians, London Welsh, O.M.T., Old Blues and London Scottish, only the last-named were able to defeat the Hospital; but it must be remembered C. L. Steyn was crocked early on in the game, and that it was the first time the Hospital had been so short as to field eight reserves. For the last match of the season one more reserve than this even was fielded, and needless to say Swansea was victorious by a greater margin than any other team throughout the season.

The Inter-Hospital Cup was retained. Charing Cross scratched in the second round, whilst U.C.H. and Bart.'s were defeated in the semi-final and final respectively, the latter, however, by the narrow margin of one try to nothing.

The French tour has already been reported in the GAZETTE, as also have the French newspaper criticisms of matches played over there last Christmas.

W. H. Taylor again played in the English trial match, and was requested to be in reserve for the Rest.

P. K. Albertijn captained the side, and it is believed that he is the first South African to hold this distinction at Guy's. All present at the cup final could not help but feel sorry he was crocked at such an early stage of the match, more especially as it was his last game for Guy's and his last day in this country. There is no doubt that in losing Albertijn, Hospital rugby has lost a great rugby strategist.

F. W. Bekker, vice-captain, did all that was expected, as is evidenced by the way he carried on after his skipper's accident in the cup final.

We regretted the loss of R. F. H. Duncan, T. L. Sprong with injured knees, and F. J. Biddle and P. F. Harvey, who left the Hospital during the season, whilst W. D. Doherty and C. N. Fouraker were unable to play for long periods owing to injuries. W. H. Taylor, F. G. Hutchinson and J. G. Zondagh left at the close of the season, all having qualified as dental surgeons. F. W. Bekker states that he is now out of his year and will assist the Nomads next season, and W. D. Doherty threatens to retire.

The following have played during the season in the 1st XV.:—

Holloway (32), Van Schalkwijk, Neser (29), Hutchinson, Bekker (26), Taylor (24), Steyn, Albertijn, Scholefield (23), Finnemore, Mostert (19), Sprong (17), Doherty (17), Londagh (15), Badenhorst (12), Harvey, Fellows-Smith, Cameron (11). Fouraker (10), de Wet Voister (9), Daneel, Hirschberg, Schabort (8), Biddle, de Toit, Trick (7), Eckhoff (6), Percival (5), Meissner (4), Williams (3), Broadfield, Jacobson, Duncan, Weinberg, Nurick (2), Orsmond, Graham-Davies, Close, Shaw, Roper, Harrop, and Meacock (1).

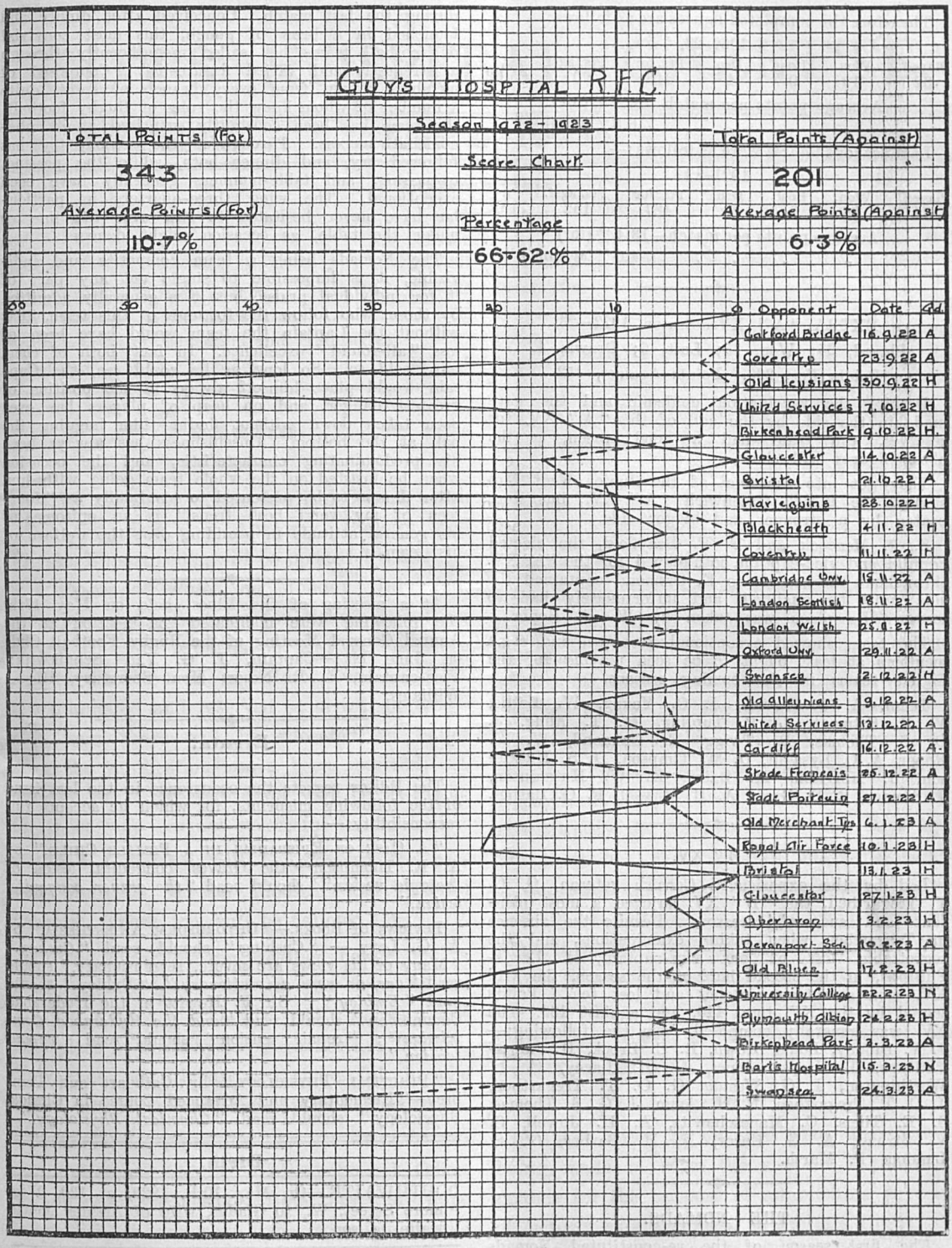
The following have scored tries:—

Steyn (19), Albertijn (11), Schalkwijk, Sprong (6), Mostert (5), Taylor, Bekker, Finnemore (4), Fellows-Smith (4), Hutchinson (3), Schofield (3), Neser, Hirschberg and Cameron (2), Harvey, Duncan, Williams, Fouraker, Meissner and Holloway 1 each. (Making a total of 81 tries.)

The following have scored goals. * indicates penalty. † dropped.—

Van Schalkwijk	...	22	Tries converted.	
Neser		5	" "	6*
Steyn		2	" "	
Albertijn...		1	" "	2† 2*
Badenhorst		3	" "	
Meissner		1	" "	

making a total of 44 goals of which 2 are dropped and 8 are penalty.



N.B.—Continuous line signifies points for, and the dotted lines points against.

Therefore the completed figures are as follows:—

1922–23.

Played.	Won.	Lost.	Drn.	Pts. for	Pts. agst.	%
32	19	9	4	343	201	65.62

Average points per match—10.7 % (for)
" " " " 6.3 % (against)

Last Seasons figures were as follows:—

1921–22

Played.	Won.	Lost.	Drn.	Pts. for	Pts. agst.	%
35	26	7	2	467	162	77.0

Average points per match—13.4 % (for)
" " " " 4.6 % (against)

EXTRA "A" XV.—Season 1922—23.

Played, 25; Won, 15; Lost, 6; Drawn, 4.

Points For, 296. Points Against, 152.

Despite the vaccination epidemic and the gaps made in the side by the call of the "A" XV. for reserves, the team had a good season, as the above figures will show.

They got into the final of the Junior Kent Cup against the R.N.C. Greenwich "A" XV., but were beaten by a stronger and bigger side.

S. P. Meacock and F. F. Brayfield, the elected captain and vice-captain, both played for the "A" XV. throughout the season, so E. Orsmond captained the side until he qualified, and unfortunately had to leave. His place was taken by W. F. Roper.

The team showed exceptional keenness, and some members at least ought to be seen playing for the higher teams in the coming seasons.

Team.—A. S. Davies, J. C. Young, W. Leslie, V. R. Estment, L. P. Tupling, M. T. Aung, J. D. S. Thomas, R. Twigg, E. Orsmond, W. F. Roper, A. C. Lysaght, D. M. Timpson, D. S. Huskisson, J. Morrison, M. Baird, E. W. Hutchinson, J. Simons, R. D. Gross, A. H. Russell, F. G. Barnes.

"B" XV.

Led by the experienced Cornish veteran, G. G. T. Tregarthen, the "B" XV. enjoyed a most pleasant and successful season. Despite the absence of Tregarthen when taking examinations, and the regrettable loss of our vice-captain, H. Lewis-Philipps, in the second half of the season, the "B" XV. won seventeen matches and lost ten. Points scored by the XV. total 440, and against 169. The XV. was generally composed from the following:—J. V. Bingay, Louis Brown, R. C. Brock, H. Lewis-Philipps, L. Hopson-Jones, G. H. Lacey, C. L. Worthington, J. G. Weston, G. G. T. Tregarthen, J. C. T. Tregarthen, R. H. Amm, J. G. S. Thomas, S. E. Theis, C. Maneschewitz, A. H. Jowell, S. V. Strong, A. G. Ensor, N. H. Barber, G. S. Landon, F. Marsh.

THE NOMADS.

The first season of the re-constituted Nomads was brought to a victorious and happy conclusion during the last match. Conceived after dinner and launched in a brew of punch, this most convivial of football teams has sailed magnificently through a strenuous and varied fixture-list. Composed of members drawn from every branch of sport, quite a number of whom knew the rules of Rugby football, the team has been constantly surprised at its phenomenal success. Throughout the season, try has followed try, and dinner both, while the passing, re-passing, and table-manners generally have been exceptional. The wing three-quarters in particular have never hesitated to slip over the line or under the table, as occasion might demand.

The Nomads being a team composite and indivisible, it is impossible to single out any part of it for individual praise, but it is generally admitted by those, who follow the fortunes of this team, that without the Captain the team would have been of less "all-round" excellence. In fact, both of them have said so. So long as he could see, the Captain would place himself always in the position of greatest danger, and no heap of players has ever been taken down without finding him hugging the ball at the bottom. Unselfishness has always been his predominating characteristic, and the occasion when he insisted on the whole team going with him after dinner to be presented to his family as "fourteen of my verri besh frens," is an epitome of his general attitude in presiding over the welfare of his team.

At a meeting of Old Blues, held on May 17th, the following were nominated for election at the Annual General Meeting of the Rugby Football Club on June 1st:—Captain, J. G. Van Schalkwijk; Vice-captain, E. E. Neser; Hon. Secretary, H. K. Williams.

Errata.

The Editor regrets the occurrence in the last issue of the following misprints, for which he accepts full responsibility:—

"A Case of Epispadias in a Female Child," by A. R. Thompson—'the Graves' congenital lesion of "ectopia vesicæ"' should read "*the graver congenital lesion.*"

Reviews of Books.—"Chloroform Anæsthesia," by A. G. Levy — "Cushing" should read "*Cushny.*" "Many of his views are severe, revolutionary," should read "*are, or were, revolutionary.*" "Exbley" should read "*Embley.*" "Sir F. Hewitt in the Hyderabad Commission" should read "*and the Hyderabad Commission*"; "repair tension" should read "*vapour tension.*"

"Practical Physiology," by Cathcart and Pembrey—"Elementary and Advanced Course in Clinical Physiology" should read "*Chemical Physiology.*"

Birth.

DOUTHWAITE.—On May 10th, 1923, at 129, Wigmore Street, W., to Gladys, wife of Arthur Douthwaite, a son.

Ed.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

THE extension of the Medical School, which comprises new Anatomy, Biology and Physics Departments, will be opened by H.R.H. The Prince of Wales, on Monday, July 2nd, at 3 p.m. Applications for tickets admitting to the Hospital grounds on that day must be sent to the Dean on, or before, June 18th. A few numbered and reserved seats will be available, and these will be allocated by ballot after the applications have been received. A number of unreserved seats will be available for those who are not successful in the ballot.

About 150 seats will be reserved for present students of the Medical and Dental Schools. These, too, will be balloted for.

In the event of the weather being fine, a platform will be erected on the steps of the Medical School. Otherwise, the ceremony will take place in the Physiological Lecture Theatre. Only those who have been successful in the ballot can be accommodated in the Theatre.

Students may obtain tickets for their friends on application at the Medical School Office, on and after Wednesday, June 13th. We hope to publish, in our next issue, complete details of the ceremony, together with information as to the time at which it will take place.

It is, we feel, not merely a coincidence that there will have taken place, within the short space of a month, the formal openings of extensions to two great medical schools in the University of London. In the near future another great building will spring into existence in the form of the Institute of Hygiene, the site of which is opposite the University Union in Malet Street. The advance in the science of medicine has been so great that an advance in the housing of all its branches is now a sheer necessity. At Guy's we can well be proud of the fact that the new Anatomy Department will be second only to that which His Majesty the King opened a few days ago. We must not, however, pin our faith solely in our buildings. It is the true spirit of devotion to a science that has made medicine what it is, and so long as we can keep that spirit, first and foremost, as the true aim of our existence, then truly we can lay claim to taking our share in the furtherance of the welfare of mankind.

As was stated in our last issue an effort is being made to raise the sum of a thousand pounds for the purpose of establishing a series of lectures as a memorial to the late Dr. A. H. Fison. In his time at Guy's there was no man who was held in greater esteem both by his

colleagues and by the students who passed through his hands. His influence will be felt for many years to come, and it is only fitting that those Guy's men, past and present, who worked with Dr. Fison and knew him, should all take their share in the establishment of the memorial which it is proposed to set up.

To the students his death meant a great, almost personal loss, and we are pleased to see that an opportunity is being given to them to help in the work of the Fison Memorial Committee. The following students have been requested by the Committee to collect subscriptions to the Fund from present Students :

MEDICALS.

1st Year (M.B.).—D. E. Dunnill.
1st Year (Conjoint).—M. F. Awdry.
2nd and 3rd Year.—N. H. Allen.
4th Year.—J. A. Simons.
5th Year.—L. G. Housden.

DENTALS.

Chemistry and Physics.—M. F. Awdry.
1st and 2nd Year (Mechanics Lab.).—K. S. Keele.
3rd and 4th Year (Conservation Room).—
G. V. Lloyd-Williams.
G. G. T. Tregarthen.

Further donations, from old Guy's men and others, will be gladly welcomed and should be forwarded to Professor T. B. Johnston, The Medical School, Guy's Hospital, S.E.1.

The following are the principal subscriptions which have been promised or received up to date. A complete list will be published at a later date :—

	£	s.	d.
The Gilchrist Trustees	100	0	0
T. B. Layton, Esq., M.S.	10	10	0
W. M. Mollison, Esq., M.Ch. ...	10	10	0
Contributions from Students, per N. H. Allen, Esq. (being surplus of money collected for wreaths) ...	12	15	6
Prof. T. B. Johnston	10	10	0
R. P. Rowlands, Esq., M.S. ...	10	10	0
Walter Leaf, Esq.	10	0	0
Prof. C. S. Gibson	10	0	0
Roger T. Smith, Esq.	5	5	0

OUR heartiest congratulations and best wishes to Mr. P. K. Albertijn, late Captain of the Hospital Rugby Fifteen, whose marriage to Anna, the daughter of Mr. and Mrs. P. J. Oosthuizen, took place in South Africa on May 27th.

IN a previous issue we put forward an appeal on behalf of Denis Astley Sanford, whose second application for election to Epsom College is now before the Governors of that institution. He is the son of an old Guy's man who died at the early age of 33, leaving his widow in straightened circumstances. The case is recommended by Mr. H. L. Eason, Dr. John Fawcett, Dr. H. French and Mr. R. P. Rowlands, amongst others. We would ask all Guy's men who can to give their help, and remind them that voting papers must be in by June 20th.

OUR heartiest congratulations to Mr. C. L. Steyn, who won the Clement Lucas Challenge Cup in the Hospital Sports at Honor Oak Park on May 30th. We were fortunate in that the weather for a short time condescended to bless the occasion with its beneficence, but the track, after the recent rain, was rather heavy, and there was a strong wind. The preliminary heats had been decided on the evening of May 28th. There were a fair number of entries and a keen contest took place in many of the events. The Coronation Curry Stakes, as usual, were a source of great enjoyment both to competitors and spectators, though perhaps more to the latter!

The precarious state of the weather was probably the cause of the decrease in the number of spectators, but we feel that more hospital men should have seized the opportunity to be present.

The thanks of all were extended to Mrs. G. Marshall, who kindly presented the prizes.

The United Hospital Sports will be held at Stamford Bridge on June 20th, at 2.30 p.m. A great effort will be made by the Guy's team to win the Athletic Shield once more. We have serious rivals, however, and we can not urge too strongly the necessity for all Guy's men to be present on this occasion and to give their full hearted support to the Hospital team.

The Annual Dinner of the United Hospitals Athletic Club will be held at the Clarendon Restaurant on the same day at 7.30 p.m.

THE Swimming Club are to be congratulated on the part which they took in the University of London Gala, held on Tuesday, June 5th, at the Goldsmith's College Bath. The Guy's team succeeded in winning the Inter-Collegiate Team Race and the Water Polo Cup, the latter for the fourth year in succession. The Team Race was won quite easily from University College by Bekker, Schofield, Marsh and Tucker. The Water Polo Cup Final resulted in a win for Guy's over University College and Hospital by 3 goals to 1 (Wakeford, Theis and Brown) after a very hard and fast game.

ON Tuesday next, June 12th, at 5.30 p.m., a debate will be held at the University Union, when three students from Columbia University, New York, will support a motion to the effect that "This House upholds the decision taken by the United States of America to abstain from membership of the League of Nations."

In American Universities debating is run on the team system, and the three visitors are a chosen team, representative of Columbia University, who are making a tour of the larger English and Scottish Universities. This is the first occasion on which the University of London has received such a visit from students of an American University, and we trust that as many students as possible will attend the debate and ensure a cordial welcome for the three visitors. In some issues of the GAZETTE a leaflet is inserted giving full particulars.

It is interesting to notice the increasing interest shown by the Hospitals in the University Union and its affairs. In the present election for new Officers and Committee Members there is one nomination from Bart.'s for the office of Vice-President, together with two nominations from Guy's and two from University College Hospital for Committee Members. We trust that these will receive adequate support from those Guy's students who are members of the Union. We have, in the columns of the GAZETTE, recorded, from time to time, the various achievements of the Union, together with its aims and objects. It has already made great progress, but a still greater future lies in front of it. A great interest has, in the past, shown by Guy's students in the various branches of University athletics, and we hope that the part taken by them in building up the future of the University Union will be no small one.

THE latest issue of "Vincula" is now on sale in the Wills Library, and contains an interesting account of the University Sports in which the Guy's team played so great a part. There are also one or two cartoons of some of the Guy's Competitors.

On June 14th the "University Union Magazine," an annual publication, will be on sale in the Wills Library. Two items of interest to Guy's men will be a couple of drawings by an artist whose talent is already well known and appreciated by readers of the GAZETTE. In addition, those who obtained their degrees in the Albert Hall on Presentation Day, and those others who went through what seemed to be a course of "physical jerks" in the presenting of the degrees, will receive an indication as to how the slight monotony of that occasion could well be relieved!

Since the last list of contributions to the Simmins Appeal Fund was published, the following have been received :—

	£	s.	d.
Messrs C. H. Bubb and W. A. Bulleid	2	2	0
Dr. J. A. Ryle	3	3	0
R. P. Rowlands, Esq., M.S.	2	2	0
Prof. T. B. Johnston	3	3	0

Guy's Hospital Nurses' League.

The Twenty-third Annual Meeting and the Fifteenth Annual Dinner of the Guy's Hospital Past and Present Nurses' League was held in the Nurses' Home on Friday, May 11th, 1923. Long before the hour fixed for the dinner, members began to arrive, and many expressions of delight were heard as friends, who had not met for years, recognised one another.

At 7 p.m. some 220 Members sat down to dinner, and it is a matter of regret that applications for seats had again to be refused. The Dining Hall, which had just been re-decorated, looked its best, the tables with their vases of lovely yellow tulips, glittering glass, etc., and white and yellow Japanese napkins, greatly adding to the charm of the effect. The Home Sister, Miss Park, and the Assistant Home Sisters are to be congratulated on the successful way in which all the arrangements for the comfort of the guests were carried out, and the dinner was voted as being one of the best that had ever been given.

After dinner, everyone assembled in the large Recreation Room, where the Annual General Meeting was held. Miss Hogg, as Matron of the Hospital and Hon. Secretary of the League, opened the meeting by saying how delighted she was to welcome so many friends that evening. She had received during the last two or three months letters of greeting from members of the League who were working in Australia, America, Baghdad, Egypt, France, India, Federated Malay States, New Zealand and South Africa. She had also received a letter from Miss Victoria Jones, who was Matron of Guy's forty-one years ago, saying how sorry she was that she could not be with them that evening, as she was getting too old to travel. She had that morning received the following telegram from Dublin :—"Anniversary Greetings, congratulations to all, Misses Haughton, Crawford, Ford, Johnston, Mann and McComas."

It was, she was sure, a very great pleasure to those present to have Dame Sarah Swift with them, as it was owing to her keen interest and wonderful powers of organisation when she was Matron of the Hospital, that the League, one of the oldest and largest Nurses' Leagues, is now such a success.

Miss Hogg wished to draw the attention of those present to two things—she hoped they would admire the wilde beste antlers in the front hall; they had been presented by a League member, Mrs. McRae (née Atkey), who had shot the animals while hunting in Nyasaland, and also to the Stall of Needlework made almost entirely by the Nurses, the proceeds of which would go towards the cost of defraying the debt of £900 remaining on the original debt on the Cottage at Honor Oak Park. If each visitor would leave behind one little silver coin, it would help swell the fund. She had great ideas for the future of the League, but this debt must first of all be defrayed. She had asked in her Christmas letter to members for ideas to help towards that end, but she had not received one. Perhaps someone present that evening could offer some suggestions which would help.

Miss Hogg next invited Miss Sheldon to take the chair, and the Minutes of the last Annual General Meeting were taken as read and signed.

Miss Sheldon then asked the Matron, as Hon. Secretary of the League, to give a report of the year's work as follows :—

About 80 Present Members have been transferred to the Past Section during the year, but 50 or 60 Members whose subscriptions are several years in arrears, and who have not replied to the enquiries sent to them, have had their names removed from the list of Members.

About 250 week-ends and days off have been spent at the Cottage during the year, and over 1,000 short visits have been paid for tea and breakfast. Many more visits would have been paid, but we had to close the Cottage for five or six weeks owing to a change of caretakers.

The Library was closed for some months during the year to allow for the books being thoroughly overhauled and re-catalogued, and our thanks are due to Sister Dorothy, Miss Griffith, for the many hours of strenuous work she gave to putting the books in order. There is now a box containing a card index of all books in the Library, arranged alphabetically under the Author's name. Ninety volumes have been rebound, and 60 new novels added together with several new medical books.

The Nurses' Tennis Club again took part in the Tennis Tournament arranged by the *Nursing Times* The competition for the beautiful Challenge Cup was most keenly contested, there being 40 entries, which included all the large general Hospitals, Infirmaries and Fever Hospitals. After several well-contested games, we were successful in entering for the Final, and after a most exciting game with the London Hospital Team, our Nurses won the final set by a narrow margin of two games, and carried off the much coveted Cup which is at present in the Dining Hall.

The entries for the Fagge Tennis Cup were also very numerous, but owing to the difficulty of playing off the sets in off-duty times and holidays intervening, many players had to be scratched. The

Final was played off in September between the two sisters Stubbs, Nurse D. Stubbs beating her sister in two straight sets. Our thanks are due to Mrs. Mollison, who so kindly coached the team again this year, and raised the standard of play so much that we were successful in winning the Challenge Cup in the Hospitals Cup Competition.

The two Tennis Courts have been much appreciated. The new one is a gift from Lord Revelstoke; he kindly came with Mr. and Mrs. Cosmo Bonsor to a tennis party at the Cottage during last summer, and we all had a most enjoyable time.

The Nurses' Swimming Club has also had a very successful year. The Annual Inter-Hospital Swimming Sports were held at the Bath Club in June, and the Inter-Hospital Silver Challenge Cup presented by Sir Alfred and Lady Fripp was again competed for and won by the Guy's Team for the second time.

We had our own Swimming Sports in the Nurses' Home in July, Lady Fripp and her two daughters being present. Twelve Nurses entered for the Silver Challenge Cup presented by Lady Fripp, and Nurse Garland, the holder of the Cup for 1921, was again successful. Misses Betty and Venetia Fripp gave a wonderful exhibition of swimming and diving, which was greatly appreciated.

In September, the Guy's Team entered for the team race between Nurses of the various London Hospitals, and were successful, in winning a silver vase which was offered by the Governors of the Prince of Wales Hospital, Tottenham, in memory of one of their Nurses.

Two Lantern Lectures have been given by the Photographic Society, and both were greatly enjoyed by those present.

I am sorry to say that neither the Debating, the Dramatic or the Musical Societies have been successful in showing that they are "live" Societies, but we hear that a special effort is to be made this year to arouse more interest in the Musical Society, and we hope the other sections of the League will do the same.

We are able to publish a new edition of the Guy's Nurses' League Book and Register this year owing to a generous gift of money from Mr. Cosmo Bonsor. The proofs of the book are now coming in from the printers, and it will probably be published during June, but I am afraid we shall not be able to send the copies out to members until Christmas, as the cost of postage would be about £20. Much difficulty has been experienced in preparing the Register, as so many Members have not sent in full details as to change of work, etc., or have omitted to return the forms sent to them.

With regard to the Exhibition now on view:—

The Needlework Exhibits were again judged by Mrs. Burgwin, who commented upon the excellence of the work shown and gave us many useful hints. The number of pieces of work sent in is much smaller than in previous years, and we hope our present Nurses will do their best to send in as much work as possible next year.

The Photographic Exhibition, too, is much smaller as regards the number of exhibits. The Classes for "entire work of Exhibitor" were very poorly represented. In Class C, however, Mr. Hollyer, who again kindly judged the Photographs, said he had great difficulty in deciding the prizes, so many of the photographs being of such a high standard.

The Prizes for the Exhibits were kindly placed at the disposal of the Judges by Lady Lane, Lady Hale White, Lady Fripp, Lady Perry, The Hon. Mrs. Molyneux, Mrs. Cosmo Bonsor, Mrs. Cameron, Mrs. Eason, Mrs. Fagge, Mrs. Hughes and Mrs. Rowlands.

Since our last Meeting, I much regret to announce the deaths of three Past Members:—

Mrs. Sarah Brown (née Clarke), who died in May, 1923, at the Queen Victoria Hospital, Johannesburg, South Africa, after a painful illness of over a year's duration. Mrs. Brown entered as a Probationer in March, 1894. In 1905 she went out to West Africa with two other Guy's Nurses with the West African Frontier Force under General Lugard, and on returning to England after some years of strenuous pioneer work, was decorated by Queen Victoria with the Royal Red Cross. On her husband's death after a few years of married life, she again took up nursing, and was for a time a Sister at the Royal Chelsea Hospital for Pensioners. In 1908 she went out to South Africa, and was appointed Staff Nurse and Sister at the Queen Victoria Hospital for Women at Johannesburg, and became Matron of the Hospital in 1915, which post she held until her death.

Mrs. Christine Magill (née Snelling), who died in June, 1922, at Hawera, New Zealand. Mrs. Magill entered Guy's as a Probationer in December, 1910, and on completion of her training, held the appointments of Sister in Charge of Evelyn and Lazarus Wards, leaving in November, 1917, in order to be married.

Miss Henrietta Denney, who died very suddenly on March 7th, 1923, at Ladysmith, while on a trip to South Africa, from heart failure following an attack of acute malaria. Miss Denney entered Guy's as a Probationer in 1904. On completion of her training she held several appointments at home and abroad, and during the War she worked in Red Cross Hospitals, and returned to Guy's as Hospital Housekeeper for a year in 1918.

In the absence of Mrs. Hughes, the Hon. Treasurer, I have much pleasure in presenting the financial statement for the year. The Hon. Members show an increase owing to Mrs. Hughes having obtained

some new Members this year. The present Members, whose subscriptions vary each year slightly, show a decrease of about £4. The Past Members' Section shows a big increase of over £100, as a great many Members, whose subscriptions were in arrears, paid the composition fee for 10 years. The subscriptions and grants have again covered the working expenses of the Cottage and different Clubs, and also paid a sum of £35 14s. 11d. as part cost of the railway tickets to Honor Oak Park for the Nurses.

We are carrying forward a balance of £153 14s. 8d., the whole of which sum we shall require to pay for the printing and publishing of the new "Nursing Guide and Register," which will cost us over £350, and we are still £900 in arrears as regards the original debt on the Cottage, so that we must keep our expenses down as low as possible.

Miss Coulton, in moving the adoption of the Annual Statement of Accounts, proposed that if all Members paid say 3s. for their "Guy's Register" this year, it might be very helpful. She considered the possibility of keeping in touch with many old friends well worth 3s. Miss Jolly, in seconding the adoption, said she entirely agreed with Miss Coulton's suggestion, and she thought Members might, in addition, collect small sums of money to reduce the debt on the Cottage.

To save time, the result of the Ballot for the election of Members of Council was not announced at the meeting, but had been posted up on the notice board in the Nurses' Home. The election of the three Hon. Members, Mrs. Doubleday, Mrs. Humphery and Mrs. Mollison, was next confirmed by the Annual Meeting.

Miss Sheldon then presented the prizes to the following Members who had been successful in the Photographic and Needlework Exhibition:—

NURSES' PHOTOGRAPHIC EXHIBITION.

Class A.

(Entire Work of Exhibitor, who has already won an award.)

1st Prize.—Miss M. Phillips: "Near Lands End."

Class B.

(Entire work of Exhibitor.)

No award.

Class C.

(Not the Entire Work of Exhibitor.)

1st Prize.—Miss C. Purse: "Through an Old Archway."

2nd Prize.—Miss G. M. Hockin: "Peter."

3rd Prize.—Miss B. Binning: "Quai du Rosaire."

4th Prize.—Nurse Hummerstone: "Ice Grotto."

NEEDLEWORK EXHIBITION.

SECTION I.

Class A.

Plain Needlework, Patching—

1st Prize.—Nurse Masters.

2nd Prize.—Nurse Thorpe.

Class B.

Fancy Work—

1st Prize.—Miss Norah Davies.

2nd Prize.—Miss Grace Mannell.

Highly Commended.—Miss J. Hills.

Highly Commended.—Nurse Buchanan.

Class C.

Lace—

1st Prize.—Nurse Knowlton.

Very Highly Commended.—Nurse Lyons.

Crochet—

1st Prize.—Miss C. Pearse.

Knitting—

1st Prize.—Mrs. A. Hawes.

Highly Commended.—Miss E. Dunn.

Class D.

Dressmaking—

1st Prize.—Sister Crocker

Millinery—

Highly Commended.—Nurse Thorpe.

Class E.

Miscellaneous—

Highly Commended.—Mrs. Burrell.

SECTION II.

Class A.

Plain Needlework—

Very Highly Commended.—Mrs. Eason.

Very Highly Commended.—Sister Lazarus.

Class C.

Crochet—

1st Prize—Mrs. Murrow.

Highly Commended.—Nurse Ferguson.

The Matron then called upon Miss Sheldon to say a few words to them upon State Registration. Miss Sheldon, who, on rising, was greeted with much applause, said:—

I have been asked to give you a little information with regard to State Registration. I will do so quite briefly, but it is a big question and it is not possible to deal with it thoroughly in a short time. I wish that I could think that everyone in this room, whether actively engaged in Nursing or not, had applied for Registration. I suggested to Matron that dinner should only be given to those who had done so, and everyone else should be supplied at separate tables with pens, ink and Schedules.

In 1919 the Ministry of Health was established and Dr. Addison was the first "Health Minister."

He drafted, on behalf of the Government, a Bill, which became the Nurses' Registration Act on the 23rd December, 1919. To administer the Act in England and Wales, the first General Nursing Council was appointed for a certain term, and in July, 1921, the Register was opened for the enrolment of Nurses.

In January, 1923, Registered Nurses, by postal ballot, elected their 16 Representatives to the second Council. Nine other persons were appointed by the Privy Council, the Board of Education and the Minister of Health.

The duty of the Council is first to form and keep the Register, and Nurses can register as General, Mental, Fever, and Sick Children's Nurses. There are also Male Nurses' Registers.

2. To regulate the conditions of admission to the Register. This in the future will be by State Examination, after training in an Institution approved by the Council and a Syllabus of Training has been issued, which at present is only advisory. A very thorny question is the admission to the Register of the "Existing Nurse." The first State Register for any profession has always admitted very widely, and a battle is now raging between those who insist upon some actual (though very limited) "Training," and those who support "Experience," however it may have been obtained. I want to draw your attention to the fact that the "Existing Nurse" is the Nurse who gained her Certificate or who completed her Training or obtained her Experience under certain conditions before Nov. 1st, 1919, and that she cannot apply for Registration after this coming July 14th, 1923. Nearly everyone here must be an Existing Nurse, and you will see there is no time to lose.

Nurses who obtained a Certificate of not less than three years' training after the 1st November, 1919, are known as Intermediate Nurses, and special regulations apply to them.

3. The General Nursing Council has also to conduct and arrange for the future Examinations, to approve Hospitals and Infirmaries as recognised Training Schools, and more difficult still to approve affiliation of Training Schools.

4. To conduct Reciprocity of Registration with parts of His Majesty's Dominions outside the United Kingdom. A protected Uniform and Badge will shortly be issued, and the Law will deal with those who falsely describe themselves as Registered Nurses.

I have only mentioned the General Nursing Council for England and Wales, but there are also Registers open for Scotland, and Irish Free State and Northern Ireland. The Profession is now on a Legal Basis, and it is the duty of every Nurse to uphold its status, especially those who have had the privilege of really good training.

State Registration has strict limitations. It cannot assist us in our economic, professional and social life, and for this we must support more ardently than ever the various Nurse Societies to which we belong. Improved conditions can only come with union and organisation, in which each of us should share. Nurse Societies should as easily confer together as other bodies. We have much to learn in this respect from other women workers.

It was a Nurse who said, "There are higher things than Patriotism," and we must look beyond our beloved Hospital, and work for the Profession the world over.

Votes of thanks were then proposed to the retiring Hon. Members of Council, Lady Perry, Mrs. Fagge, and Mrs. Cameron, to the various Officers, to the Home Sister and to Miss Sheldon for presiding.

Tea and coffee were next served, and selections of music, given by present Members of the League working in the Hospital, greatly added to the enjoyment of all present. Before leaving, many Members visited the new Electrical School, the Preliminary Training School, the Exhibitions of Needlework and Photographs, and the bazaar which was so successfully presided over by Sister Rebecca and Sister Lorna that very little remained at the end of the evening. We are sure that everyone will be interested to hear that the proceeds of the Sale of Work and the Raffles amounted to £60 9s.

Guy's Hospital Ladies' Association.

The Twenty-eighth Annual Meeting of the Guy's Hospital Ladies' Association was held, in the Court Room, on Tuesday, May 15th. Mr. Cosmo Bonsor presided and there was a large attendance.

The Governors of the Hospital invited the members and their friends to take tea after the Meeting; this, by the kindness of the Matron and the Nursing Staff, was provided in the Nurses' Home. About 1,400 garments, contributed by the London working parties and the local Branches, were exhibited and the members were shown some of the wards and special departments of the Hospital by the Sisters and Nurses.

The Association has already endowed two beds and two cots and has, this year, handed over to the Treasurer of the Hospital £700 for the further maintenance and endowment of beds and cots in Victoria Ward.

New members are greatly needed and the Committee makes an urgent appeal to the wives, mothers and sisters of all past and present Guy's men to join the Association, and help to carry on the work begun in 1895. Any further information will be gladly given by the Hon. Secretary, G.H.L.A., 73, Wimpole Street, W.1.

Some Aspects of Education and Training in Relation to Mental Disorder.

The Third Maudsley Lecture

Delivered by Sir MAURICE CRAIG, C.B.E., M.A., M.D.Camb., F.R.C.P., at the Quarterly Meeting of the Medico-Psychological Association of Great Britain and Ireland, held at the County Hall, Spring Gardens, London, on Thursday, May 25th, 1922.

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(*Concluded*).

I will now proceed to consider emotion. We owe to Déjerine a debt of gratitude for the emphasis he has laid on this attribute of mind and how it may affect the mental health. Everyone knows how devastating is passion and how exhausted it leaves the subject who has been enduring it. But emotion exists in varying degrees, and although in its more severe forms its physical concomitants of pallor, flushing, tears, tremors and the like are in evidence, some of the more subtle types are less easy of discernment owing to the apparent absence of somatic signs, and yet they may be working steady and untold havoc. Emotion becomes attached to ideas and groups of ideas, and if the emotion is an unhappy or an unpleasant one, it very readily leads to a "preoccupation" which may slowly absorb attention until it seems to fill the whole field of thought. "Dreads" and "fears" belong to this order and these are not uncommon in childhood. Many fears are unreasonable but this does not lessen their power, and the inability to drive them away is both depressing and terrifying to the sufferer. He must be helped by a sympathetic and philosophic understanding. Unless relieved, a fear of this kind may affect the sleep and produce bodily disturbances and lessen mental activities by setting up a hyperattention on one subject, instead of the normal state of being able to turn the attention in any direction. Now emotion of this or a similar kind may result in the development of a sense of inferiority—a feeling of being unlike others. When this takes place introspection begins to play an important part. The healthy mind is largely extroverted; thoughts are projected outwards, but in certain morbid emotional states the process is reversed and everything is turned inwards. This leads to unhealthy reasoning; it interferes with the relationship of the child to others and not infrequently results in a solitary existence. The child who has formerly been fond of companionship and who in course of time becomes lonesome is usually evoluting into an abnormal mental state, and every effort should be made to clear away the difficulties. Unless this can be done, the morbid outlook, which at first is scarcely discernible, becomes, over extended time, a factor of such importance that life is almost unbearable. For this feeling of inferiority gives rise to suspicions, ideas of persecution and resentment, any of which are factors of no mean importance in the mental make-up of an individual. Some children develop this sense of inferiority from being laughed at by their school-fellows. I do not wish to convey that "chaffing" is not in the main a healthy mental exercise, but it may stultify, if not worse, the intellectual growth of some children, and it is these whom we ought to save if we observe as we should do. I have heard a well-known training officer in the Army say that a man who was "gun-shy" and who was clumsy at games has ultimately excelled in shooting and in sport by steady encouragement, whereas experience has shown that were this not given him and were he allowed to be unduly chaffed, he would drift, as many have drifted, into a solitary, useless person, full of grievances. Remember that mind is never stationary and in the course of evolution factors which are of small moment to-day may in time become of absorbing importance. Maudsley recognised this, for in speaking of extreme shyness which is the unfortunate disqualification of some nervous temperaments, he writes: "Only those who have it can know how sore an affliction it is and how great a let and hindrance to them through life. Nay, it sometimes wrecks a life. For as the unamiable proclivity of mankind, as of other animals, is to set upon and persecute any individual of the species which differs from the conventional type, it happens that when a nervously sensitive and shy boy is sent to school he is teased and bullied there because he is not like other boys. If he meets with no one to understand him, to show him sympathy and kindness, he gets more and more estranged from his fellows, more and more he feels himself a peculiar and separate being, suffers, mopes, and pines in solitude, and in

the end is so shattered mentally perhaps as never in after life to get over the injury which has been done to him." Those who have children in their keeping and who believe that boys are best left to themselves to find their own places among their fellows, to statements such as I have just read make answer, "Yes, we know all this, but the few must suffer for the good of the majority." My reply must be, "Is this necessary?" The educationalist does not keep back the brilliant child; he bestows upon him his special attention for reasons which are obvious. My experience goes to show that the rewards will be as great for a more careful study of other types.

Repression is a mechanism which has attracted increasing attention with the advent of what is commonly spoken of as the new psychology. Freud laid down that forgetting is not necessarily a negative process but a positive one, and that experiences of an unpleasant character do not fade away with time, but are definitely repressed out of consciousness. This is probably only partially true; some natures undoubtedly have to treat unpleasant experiences in this way, but many do not do so. Freud, realised that there must always be a danger of a conflict taking place between the primitive instincts and the demands of the community, and further that a termination of such a conflict may only be possible by the active repression of the former, which usually entails emotion and is in consequence fraught with danger. If the individual is successful in fully repressing the unpleasant experience, it passes out of the realm of consciousness; nevertheless Freud has shown that it may remain as a dissociated portion of the mind, with the potentiality of becoming active under certain conditions on account of the original emotion attached to it. According to Freud and others its harmful effect is the amnesia (loss of memory) occasioned by it. Wingfield, in his book on hypnotism, lays special stress upon the preceding emotional state of a repressed painful experience. He gives instances in support of his view that the emotion always precedes the rising of the repressed thought into consciousness, and thus the emotion leads to an automatic shutting out of the incident until in time it is entirely forgotten, the emotion alone remaining. On the other hand, there is no doubt that many so-called repressions are not fully repressed but remain more in the realm of consciousness than some authorities would suggest, but nevertheless they have a very wearing effect upon the nervous system and in the course of time begin to have a deleterious effect upon the mind of the individual. Repression takes place during all ages, but the struggle with authority is more common during certain periods of childhood and the damaging effect of a conflict is more serious upon the growing plastic brain of the young. That Freud was wrong in believing that most of these repressed complexes were sexual in character is becoming increasingly evident, and I have long felt that when this is dropped as an intrinsic part of the Freudian theory the latter will greatly benefit. To me Freud's teaching is valuable, not in its methods of psycho-analytical treatment, but because it emphasises an important factor which had been overlooked—how conflict with subsequent repression may injure the mind. The knowledge of this alone must make parents and educationalists pause for reflection and to examine whether their attitude towards the young in their charge is in accordance with it. It is not my intention to convey that all repression is harmful, for indeed repression is a normal mental process, but like the "will," some persons try to use it for unsuitable purposes. Repressions that are harmful usually tend to centre round some morbid thought or some particularly disturbing experience. It is the psychological atmosphere in which the child develops that leaves its mark upon its future life, and therefore its later welfare is dependent upon those conflicts, repressions and any other mental conditions leading to unrest being especially guarded against. If this were fully known and appreciated I believe that greater consideration would be given to the conduct of the home. Children, and especially the sensitive ones, are far more perceptive than many adults give credit to; they note the gesture, the conduct and the language of those about them and they rationalise in an elemental way, but it is none the less leaving its impress on their evoluting minds. Further, it is all-important to bear in remembrance that it is not the subjects which are freely talked about by the child that are usually harmful, but those upon which he introspects in silence. To the observant person gesture-language will convey as much, if not more, than words, and no one can claim to be an efficient trainer of children unless he is equipped with the faculty

of reading it. Words may be misleading, but gesture is seldom so, for the latter is complex and is the outward and visible sign of inward sensation and emotion. As Maudsley once wrote: "What is mind-reading but muscle-reading through movements so fine as to be discernible only by a practised sensibility?" Every adult knows the effect exercised by the environment of an unrestful house and its influence upon a child must be infinitely greater, and when to unrest there is added apprehension or definite fear, it does not call for a great effort of the imagination to appreciate the damage that is being done. The undisciplined man is a burden to himself and a thorn in the side of his fellows, but the child who has to live with him is in danger of mental ruin. This may appear to be forcible language, but thirty years of experience of nerve work forbids me to soften it. The greatest hope for the lessening of the incidence of mental disorder lies in a fuller awakening to the duties of the parent to the child. There is one thing that the State can never effectually perform and that is the office of parent, and those who wish that it should do so either have a very small insight into what is really meant by parental care, or they must feel that the thoughtlessness of the average parent is such that the child is safer out of his keeping. Had we but the vision to see, there is no reason why either of these views should remain active, but to escape from them there is only one way, and that is to increase the sense of responsibility of the parents and not to lessen it, otherwise the natural consequences must follow. Those who call for larger families without seeing that the parents who have them appreciate their duties are incurring a grave responsibility. The stability and happiness of the mass are the combined effect of these virtues in the individual and it is to parental care that we must look to lay their foundations.

The child who is naturally repressed is without doubt more difficult to train than the one whose temperament is open and frank. It is less easy to understand and is usually resentful of interference, and for this latter reason punishment not infrequently does more harm than good unless it is carried out with great circumspection. On the other hand such a child may develop into a fine character if training has been judicious, for it is often capable of much reasoning power and its intelligence may be above its years. When and in what way to punish the child become problems of increasing perplexity as more is known of the working of mind. The crude rule-of-thumb methods of the past must be more and more challenged. We now know that in apparently correcting a fault we may damage the mental development of the child unless we keep this actively in mind when meting out the sentence. Take, for example, the matter of corporal punishment—in referring to this I do not wish to be misunderstood; I am not one of those who believe that all punishment is wrong, for whilst human nature is what it is punishment in some form or other will be necessary—my criticism is that it is too often administered according to tradition and custom rather than by the exercise of a wise judgment. For example, it is difficult to understand how caning and corporal punishment are so commonly left in the hands of prefects, whose knowledge of mind development must be non-existent, and this being the case it is the crime that is punished and not the author of it, and the effect that it may have upon the latter is left on the lap of the gods. I have known of a young boy caned by prefects several times in his first term for minor offences until finally he ran away in a high state of nervous excitement, and this at one of our best public schools. Such treatment may claim to make some boys into fine men, but undoubtedly it also causes some to become nervous wrecks, and I cannot help feeling that it ought not to surpass the wit of man to evolve some scheme of punishment which should have all the benefits of the present system and less of the disadvantages. Government by prefects has, when properly carried out, a highly beneficial effect upon a school, but duties should not be imposed upon them which are clearly beyond their powers of full appreciation. Dr. Herbert Gray, in writing on corporal punishment, says that he has "no hesitation in maintaining that it should be confined, when administered at all, to offences of a moral or quasi-moral character, such as lying, cheating, evil language, and misconduct of similar type." Now that it is known how damaging is emotional shock to some individuals—and this must be more likely to occur in a child—it behoves those in authority to re-survey the grounds for and the methods of administration of corporal punishment from the psychological standpoint. I am not aware to what extent the writing of "lines" is still practised in schools, but it is

a form of punishment to which there are serious objections. To write out hundreds of "lines" is to fatigue the hand centre in addition to other parts of the nervous system, and when it is imposed for "inattention" which may be due to brain-fag, the result is obvious. Speed alone in a mental exercise is exceptionally fatiguing, and what boy does not write his "lines" with the greatest despatch at his command, and what master does not know this, for does he not intend to keep the boy at it for a definite time, and to do this he must be guided by possible pace rather than by slowness? I know that many school authorities are taking a more scientific out-look in the treatment of delinquents, but much has yet to be done, for traditions die hard, and it is apt to be said that "what was good enough for us is good enough for the boys of to-day."

There is another type of child to which I might refer, not because of the frequency with which it is met, but rather on account of the very damaging effect it usually has upon its fellows. Fearlessness is an attribute which rightly holds a high place in character, but like all virtues it may lose its value unless it is tempered by judgment. To train a child to be fearless unless at the same time it is acquiring experience is to court very definite danger. The fearless child becomes independent above its years, and with independence it may develop a dictatorial and bullying spirit. Many of these children when puberty is over pay less and less heed to authority and become quite insensible to kindness or severity, and not a few fall into the hands of the police for breaking the law. This all goes to prove that mind development should be a homogeneous whole, and although interest and aptitude may tend to quicken growth in certain directions, these tendencies must be watched and kept within reasonable limits.

During recent years much has been written regarding phantasy—not that it was a fresh discovery, but on account of its place in the new psychology. Now make-believe is a normal characteristic in all young children, but some have it much more fully developed than others, and these are usually of the sensitive type. As with reality there are two large classes of phantasy: the one includes all that stands for brightness and happiness and the other all that is ugly and forbidding. That the latter should play so formidable a part in the child's story- and picture-book has always been an enigma to me, for to the sensitive child it may do much harm and its power for good must be very small. Nevertheless phantasy is good, as it smooths the path of the child on its way to the stern realities of life. Whatever its troubles, it can soon forget them in the land of fairies. But as years pass it is necessary for phantasy to be slowly replaced by realities, and it is incumbent upon the teacher to prepare the way for this transition. Realities must not be made too hard, otherwise the child is driven back into phantasy, or in silence it may fret until the rising emotion shows itself in varied forms of nervous disturbance, or if it is made of tougher material it may slowly harden into an attitude of careless indifference or open rebellion. One child easily slides over the difficulties which mark the opening years of its life, whereas another requires help, and it is urgent that this help should be given. What I have already described as a wise, philosophic, yet sympathetic understanding is what is called for, and not the enervating "sloppy" sympathy which is apt to be given, interspersed from time to time with an undisciplined display of irritability.

Although phantasy is a marked feature of the mind during early childhood, it may persist or re-appear in the later school days. If so, it will call for inquiry as to why it is there. The adult has his day-dreams, but they ought merely to be an outgrowth of reality—a visualising of some ambition that is as yet far off but the contemplation of which affords encouragement in the present and a vision of hope for the future. On the other hand, phantasy which has no normal relationship to life indicates that an older child has either regressed or that his mind is not developing normally. At this point I may be met by those who believe that "self-expression" in whatever form it may take is the factor of overwhelming importance throughout a child's life, and that what some may regard as phantasy is nothing more than the unfolding of a creative mind, which may easily be stunted by careless handling or failure to appreciate the condition in its true light. I agree, as I suppose most would agree, that self-expression has been sadly neglected in the past and that schools have been conducted to meet the requirements of a standardised child which, to avoid any difficulties in differentiation, has been termed the normal child. Those whose

mentality did not permit of their fitting into this charmed circle either risked becoming chronic failues, or, having weathered the contempt to which they may have been exposed in early life, have developed, when once freed from the system, into successful men in whatever sphere of work they may have taken up. But because "self-expression" has been a neglected factor in the past, there is no reason why it should be granted too free a place in the education of the future. Sooner or later the instinctive impulses of the child must meet and, if untrained and unconditioned, must clash with the social *régime*; he is unable to free himself from the herd. What he thinks of others and what they think of him are musings which, if allowed to run riot, may entail his downfall, but, if rightly directed, may lead to the development of a character where self is almost lost in interest for others. It is this adjusting to the demands of the herd which is often so difficult, and when one appreciates what it means, the adaptation of an ever-changing being to an equally kaleidoscopic world, it is remarkable that misfits are not more common. But apart from actual misfits we are still far behind in what could be done to make the best of life and to equip the young for the work that they have to do. The normal child is extroverted, and if introversion is noted every care must be taken to develop its ease of expression. It is frequently the sensitive child who is introverted, and he may otherwise be one who is endowed above the usual with powers of perception, and, given suitable care and training, is often capable of fine development. If, on the other hand, by any misfortune it finds itself under the care of unimaginative and commonplace persons, its life will become increasingly cramped by the conflicts within and the cruel pressure from without. Nothing is more tragic than to see the introverted child suffering mental anguish more exquisite than physical pain, and in consequence closing the way to mental development and in many cases all because it is not understood. But a child may be too extroverted, and in this case also its mental future is in jeopardy, but in a different way. Its danger is in the limelight, and in an undue appraisement of its ability. If its fibre is tough it may at first trample its way through or over the herd until it ultimately breaks down, a victim of its own conceit. Nevertheless if the dangers of such a child are appreciated early enough and if it is handled with judgment, it will be found in many ways one who is more easily led than the introverted one; but time is against the teacher, and once puberty is reached the task becomes infinitely more difficult.

As childhood advances all the natural instinctive impulses must become conditioned, and by this we mean that experience must modify them. Impulse is an unconditioned reflex, whereas a volitional act is an action which has been toned by experience to the environment in which we live. The instinctive impulse of a man who is exposed to danger is to run away, but training and experience teach the soldier that this is contrary to the opinion of the herd, and in consequence the fundamental law of self-preservation is conditioned and annulled by the dictates of the social order. Untruthfulness and other moral delinquincies belong to this category, but just as many men who ultimately turn out to be trustworthy soldiers cannot be trained by any intensive system, similarly certain children require long and careful handling By harshness the normal sensitive child may become confirmed in its lying, for falsehood is a defence of the fearful, and once it is consciously established, it becomes an active detrimental factor in its future mental welfare.

In this way we reach what is and ever must be the goal of all mind-training—self-discipline. By this I do not mean a mere clicking of heels to authority, right as this may be in its proper place, but true discipline, connoting the right proportional working of all the attributes of mind in an even way. The undisciplined nervous system is one which reacts impulsively and violently on slight provocation. Persons who are undisciplined and querulous not infrequently vent their displeasure in spiteful acts; they are highly unreliable, and yet they may be possessed of a personal charm which throws their defects into singular relief. There is no unhappier state than that of instability when a man finds himself reacting abnormally to thought and environment. Ultimately he finds that there is no place for him in the world, and rationalise as he may that his so-called undisciplined outlook is a proper reaction to an unfriendly community, his own uncontrolled language and actions alienate him from the herd. Many of these individuals end their days in mental hospitals, their nervous system having finally broken down under the strain of contending with men and things.

and yet, when carefully analysed from the psychological standpoint, there can be discovered no intrinsic reason why such a state of mental unsoundness should have been brought about, had reasonable care and supervision directed the earlier years of their life. All children are undisciplined, and though the majority acquire controls by the education and training which they receive, some lag behind in gaining them. The child that does not become disciplined at the usual age is often quite intelligent and may even attain to a high standard of knowledge, but when a child shows defects in the matter of control it is necessary to focus the immediate training upon these defects, for knowledge is useless to the possessor of an unbalanced mind; far wiser is it first to obtain stability, and then to impart knowledge. The irritable child, like the irritable man, must not be regarded as in good mental health, but the brain of an adult takes longer to damage, and although it is true that each outburst of irritability is gradually undermining the mental power of the man, its effect upon the plastic growing brain of the child is vastly more injurious. Further, the child forms habits with extraordinary ease, and once established they are infinitely difficult to displace. Discipline is not a product of short training, for it is not elemental; its component parts are highly complex, and in consequence its development is slow and subtle, but once established its reward is stability, and it protects its possessor from the effects of undue strain of conflicts within and irritation from without. As we acquire knowledge, thought and acts which at first were accompanied by a feeling of effort grow to be automatic. Right thoughts should become associated with proper actions. Sound experience means that we instinctively do the right thing at the right moment; the adult mind should be stored with judgments which have been tested by experience and can be called up more or less automatically when occasion requires it. It is not the knowledge that we have acquired that counts so much as with what other things this knowledge is associated. The knowledge of finance associated with extravagant or penurious thoughts is of ill-value; cleverness and much learning when associated with conceit are singularly unattractive; business capacity when associated with an intolerance for others often is a valueless possession. When we come to test a man's endurance or what he has made of his life it is rarely pure learning, it is knowledge added to something else which gives it its value, and it is this "something else" which either makes or mars the history of that life. It is outside the purpose of this lecture to discuss all that goes to make character, but just as the good morale of troops keeps an army in a high state of efficiency, so with the individual it is the fundamentals that count.

It is remarkable what apparently insignificant factors may so increase the burdens of life that, starting as a small nucleus, they may form a centre which in course of years may collect round it other factors, until the cumulative effect is greatly to disturb the mental equilibrium of the individual. What for want of a better term may be called "sloppy-mindedness" is an example of this. Some parents give so little heed to the future welfare of their offspring that they bring them up indifferent to principles and untidy in thought and action. The innate intelligence of the child may permit of its acquiring knowledge maybe above its fellows, and when it starts on its life-work all goes well until responsibilities have to be accepted. It is then that the "sloppy-minded" training begins to tell, for it may and often does so handicap the man's progress that troubles which might easily have been prevented overtake him, and these and the unhappiness which is associated with them become so disturbing as to render him a mentally broken and disappointed man. There is another group of cases which are particularly sad, as it is often the break-up of a life which from the earliest of days has been devoted to close application to work; this group includes those who have risen from the ranks and who through scholarship or unceasing study have acquired some good position, only to find that their personality is unsuited for the post. The issues of life cannot and must not be lightly faced; phrases like "equal opportunities for all" have a fascinating sound to the uncritical mind, but if you carry this assumed truth into general practice, your kindly attention will bring about the mental downfall of many of those whom you intended to help. The tendency of the age is to standardise everything, but when this system is carried into the management of human affairs the results cannot but be disastrous. Although it may be true that men whose mental capacity is nearly equal can be arranged in groups, and although, further, it is true that a certain number may

be capable of being transferred from lower to much higher grades, the majority must be content to move within narrow limits. Evolution is at all times slow, and to attempt to hasten it is not only unwise but disappointing. The natural laws plough on with an unmerciful regularity, for ever heedless of the ever-changing fashions in the opinions of men. It is proper to see that the want neither of money nor of position should stand in the way of the advancement of those whose natural gifts permit of this, but to regard it as the normal right of the majority is to think a vain thing. I know that my critics will say that this is precisely the difficulty—to know who has natural gifts and how such can be gauged. To these my reply must be that this is the duty of the educationalist, for he must search until he finds some reliable test which shall decide this problem, but to attempt what some would have us do, to give all a standard chance, is too wasteful in practice and too hurtful in those who fail. The problem is full of perplexities, and no doubt there are many who are striving to find the right solution, but unfortunately the claimants who demand to be heard are many, and each regards the proposition with a distinct bias of his own. There is first the parent who sees in his offspring the qualities which, if given opportunity, are pregnant with possibilities; and next the schoolmaster, kindly and hopeful, fully aware of the limitations of his pupil, but always ready to give him the benefit of any doubt. Next in order comes the array of examiners and school inspectors, men whose outlook is largely concerned with a standard of knowledge, the human element only entering into the scheme as a means of expressing that knowledge. Next come the Universities and great seats of learning, whose duty it is to indicate the educational needs of men and to hold out as their highest aim, irrespective of individual characteristics, the attainment of pure scholarship. Finally we come to the Legislature, the mouthpiece of popular opinion, who are willing to fling education into the maelstrom of political notions, careless of the effect so long as it appeals to the masses and in consequence strengthens some party at the polls. If only each claimant would wholeheartedly view the proposition from the standpoint of the child and his future welfare and put away from his mind all other considerations, the problem should be capable of a right solution.

Psychological medicine has been progressing rapidly during recent years, and with this one of the most satisfactory features is that the word "mental" is being used more and more freely with reference to normal individuals. At one time any reference to a mental state had a terrifying effect upon the lay mind, and it is all to the good to find that the public is learning that mental processes are common to the normal as well as to the abnormal. We now await the time when the Legislature will show its appreciation of the advance that has been made by relaxing the law so that the knowledge that has been acquired may be the more readily used for the benefit of the people. In the meantime we must go on teaching that the mental health of the nation is largely dependent upon a wide-spread knowledge of the requirements for keeping a mind in health. The position is in every way comparable to the problem of attaining a high standard of physical fitness. The onus must ultimately rest with the people; the medical profession can but point the way. If the present writing on the wall is correct, that the early years of life are the important years for determining the stability of the mind of the adult, it behoves us to put this knowledge into practice. The country is learning that the greatest asset to a nation is good health and that a small number of A1 men count for infinitely more than a crowd of the C3 class. To attain this end we must look to education, not merely from the narrower standpoint of learning, but where learning is superimposed upon a stable mind. I would close, as I began, on a note of hopefulness. The criticism that is often made against prophylactic measures is that it is pure hypothesis to say that such and such a condition might have arisen, and that the claims of having prevented it are in consequence mere assumption. We at least shall be free from such uncertainty, for we shall be able to point to fewer and less populated mental hospitals. We know that this result can be attained, even with our present knowledge, and all we ask is that those restrictions which hinder us should be removed, and that the lay public should bear in mind that mental disorder is rarely of sudden development and that much more can be done to prevent it than they at present appreciate. For ourselves, we who work in the sphere of mental medicine must keep widening

and ever widening our vision as our knowledge advances. In our struggle to repair disease, we must not lose sight of the other matters which belong to our inheritance, for our work lies in no narrow scope, covering, as it does, all that appertains to the mind of man.

Two Cases of Strangulated Umbilical Herniae.

The following two cases of strangulated umbilical herniæ are of interest mainly on account of the two different operations that were performed on them.

They show many details in common, but differ from each other in many respects. Both were admitted under Mr. Rowlands during one of his "take in" weeks.

Case I.—Rebecca F., married, aged 46 years, was admitted into Evelyn Ward on Sunday, 11th February, 1923. She was unable to speak much English and so an accurate account of her illness could not be obtained. The following account was given by her daughter and it is of course lacking in details. She stated her mother had had a swelling on the front of her abdomen for 20 years. A few years ago she had a similar attack to the one she now was suffering from, but she had recovered from it and from then till now she had been caused no inconvenience by the swelling. On Sunday, 11th February, 1923, she was cooking the breakfast at 8 a.m. when she was seized with violent pains in the swelling. Poultices were applied to it but she could get no relief and so a doctor was called in who ordered her removal to Guy's Hospital. She arrived here at 7.30 p.m. that night.

C.O.A.—She is a very large and fat woman. On the front of her abdomen about the middle is a large swelling lying transversely. It is constricted at its base. The skin covering it is inflamed and blistered in patches. To percussion parts are resonant others dull. It does not seem to give her much pain as it is examined. It is very evident that she has acute chronic bronchitis. Pulse 72, temperature 95·8 F., respiration 40.

Attempts to reduce the hernia produced a gurgle but this did not affect the size of it.

She was seen on Sunday night, but in view of her grave general condition, the history of a similar attack from which she recovered and the fact that part of the hernia was reduced, palliative treatment was considered suitable.

Mr. Rowlands saw her at 2 p.m. on the Monday. Her condition then was much worse. The hernia was obviously gangrenous. The skin was a purple colour and a peculiar smell was noticeable. Pulse 110, temperature 101° F., respiration 32. Mr. Rowlands decided to operate under a local anæsthetic on account of her chest condition.

Operation.—Novocaine ·75 per cent. and mag. sulph. ·5 per cent. was injected into the skin all round the hernia. A Mayo's incision about 12ins. long was made and the neck of the hernial sac dissected out. This was opened round its base and a mass of gangrenous large bowel was seen, some parts distended with gas, others collapsed. The two extremities of the gangrenous bowel were found and it was then seen to be practically the whole of the transverse colon. The two extremities were divided and the transverse mesocolon ligatured. During this process troublesome bleeding occurred from the middle colic artery and she lost a fair quantity of blood from it before it was effectively stopped. The gangrenous bowel, the hernial sac and the skin were removed whole. The two ends of the transverse colon were brought together and an end to end anastomosis made. A rubber tube was inserted into the proxenal bowel at the anastomosis which was not quite complete. It was decided that a radical cure was inadvisable on account of her condition and so the superficial fascia and skin were rapidly sewn up. The wound was drained.

The local anæsthetic was a complete success, the patient apparently feeling no pain throughout the operation, which lasted 45 minutes in all.

The tube worked out within a week and she developed a large fæcal fistula. The remainder of the wound healed well. She was given paraffin oil and frequent enemata. The fæcal fistula closed in 3 weeks and the wound closed satisfactorily.

An abdominal belt was fitted and patient was discharged on 7th April, 1923.

Case II.

Georgina H., married, aged 61 years, was admitted into Dorcas Ward on Saturday, 10th February, 1923.

She gave the following history:—Ten to twelve years ago she noticed a slight swelling about the size of a chestnut just below the umbilicus. It gave her no pain and no cause to worry about it. It has gradually enlarged until it has reached its present size.

During the last few months if she received a blow on it during her work she experienced a "stomach ache" feeling in it which soon passed off. On Tuesday, while she was about her household duties, she felt something shift in the swelling and she again experienced the "stomach ache" pain. On this occasion she did not injure it. The pain did not pass off as on former occasions, but became worse, and she vomited many times during the day. The vomit was a yellowish colour and had a bad odour. She vomited frequently during the next

few days and her bowels remained constipated. On Saturday she sent for a doctor who sent her to Guy's. She arrived here the same evening.

C.O.A.—She is a woman of considerable size, but smaller than case I. Her abdomen is distended and comes to a blunt apex at the region of the umbilicus. Around the apex for a radius of about 4ins. the skin is red and indurated. Beneath this skin a solid mass can be felt, having a very definite border corrresponding to the margin of the redness. It is very tender and is dull to percussion all over. Pulse 124, temperature 99·4° F., respiration 22.

Under general anæsthetic Mr. Massie operated the same evening—a Mayo's incision being used. The neck of the hernial sac was divided and the sac opened. The diameter of the neck was about 2½ins. The sac contained about 8ins. of small intestine which was purple, a good deal of amentum and fluid. One extremity of the gut where it was pressed against the neck was gangrenous for about 1-8th inch wide, the mesenteric border alone being in good condition. On account of its narrowness and also that the mesenteric attachment was healthy, it was decided to turn this portion of the gut in and not resect it. This was done without any appreciable narrowing of the lumen. A small point about 6 ins. above this perforated. This was closed by a purse string suture. Hot towels were applied to the gut, which began to recover immediately. On account of her condition a radical cure was considered inadvisable, so the gut was returned to the abdomen with some difficulty and the incision quickly closed.

She made an uninterrupted recovery. An abdominal belt was fitted, and she was discharged on 23rd March, 1923, quite restored to her usual health.

These cases are reported by the kind permission of Mr. Rowlands.

E.H.J.B.

Specialities.

"HARPIC."

THE HARPIC MANUFACTURING CO., 1, Avenue Road, Camberwell Green, S.E.5.

"Harpic" is a clean, practically odourless powder for which the makers claim that a little sprinkled into the w.c. bowl at night and left till morning, will, when flushed, remove every stain from the inside of the bowl, cleansing every part, and thoroughly disinfecting the pipe to the main.

It will be found most useful in every Institution for keeping the sanitary arrangements in a healthy condition.

Samples can be obtained post free from the manufacturers.

KELLOGG'S BRAN.

S. D. SIMOND & CO., LTD., 10, Monument Street, London, E.C.3.

This is a Bran Preparation specially prepared as an article of diet for persons suffering from constipation.

The analysis given is as follows:—

Moisture	2·50
Ash	8·41
Protein	15·8
Fat	2·8
Crude Fibre	2·9
Carbohydrates	61·6

The percentage of Protein, Fat, and Carbohydrates will be noted.

Introduced from Ontario, Canada, where its value has been widely recognised and appreciated for several years, it is anticipated this Preparation will find equal favour in this country.

It is an excellent Cereal Food, a pleasant addition to the breakfast table, and will, it is hoped, in due time, supersede many of the better known Digestive Foods.

Messrs. S. D. Simond & Co., Ltd., will be pleased to send samples on application.

Pass List.

Society of Apothecaries of London.

May, 1922.

Surgery.—J. Totton.

Medicine.—J. Totton, M. Hawke.

The Diploma of the Society was granted to the above-mentioned candidates.

Royal College of Surgeons.

L.D.S.

FINAL EXAMINATION. May, 1923.

PART I.

F. Crone.
H. Metheringham.
J. B. Roberts.
J. L. T. Urquhart.
F. N. Van der Pant.
T. B. Berry.
A. E. Tidd.
E. E. Gibson.
R. S. Matthews.
G. A. Sargent.
J. C. Rowbotham.

PART II.

F. Crone.
J. B. Roberts.
J. L. T. Urquhart.
F. N. Van der Pant.
J. V. Bingay.
W. L. Boness.
A. S. Davies.
R. Edwards.
H. D. Hall.
E. V. Hayes.
T. G. Lloyd.
V. R. Roberts.
E. L. Sprong.
G. R. M. Van der Merwe.
H. P. Bayliss.
F. H. Hayns.
J. E. B. Smith.

Guy's Hospital Rowing Club.

Inter-Hospital Races.

The Inter-Hospital Races were rowed on Friday, May 11th, at 2.30 p.m., at Putney. The weather and tide conditions at the start were none too favourable, but cleared up just before the races started.

Mr. Souttar, late President of the United Hospitals Rowing Club, umpired, and Mr. M. K. Morriss, of the London Rowing Club, acted as distance judge.

The senior event was rowed from Hammersmith Bridge to the University Stone and the junior event from the Mile Post to the University Stone.

Mrs. Mutch kindly consented to present the Cups after tea. Later Dr. Ryffel took the chair at the dinner held by the crews at the London Rowing Club. The speeches reached a high standard of oratory and mutual admiration and a very enjoyable evening followed.

It was very gratifying to find this event so enthusiastically supported, and our thanks are due to all at the Hospital and at the London Rowing Club for their help and encouragement.

GUYS HOSPITAL FIRST EIGHT

(Winners of Senior Inter-Hospital Rowing Cup).

Back row (*left to right*):—E. T. CLIFTON (*4*), A. S. GOUGH (*bow*), K. S. KEELE (*7*), I. P. BEAUCHAMP (*6*), C. K. COLWILL (*2*).
Front row (*left to right*):—K. O. PARSONS (*5*), F. C. MILLER (*stroke*), A. TOM (*3*).
W. A. CALDWELL (*cox*).

SENIOR CUP.

This year this race was rowed in eights, instead of in coxswainless fours, as in previous years.

An eight had been going out twice a week during the winter, but unfortunately about six weeks before the race, owing to stress of work, some of our more experienced oarsmen found themselves unable to continue rowing. However, a crew was finally got together and started going out every evening,

about a month before the race. Coaching was spasmodic, but later Mr. Hylton-Cleaver undertook to coach the eight regularly. At this period the eight was distinctly rough, but by a gradual process of elimination and substitution they began to look more promising as time went on. Ten days before the race K. O. Parsons, a sound oar and a good shover, came into the boat at 5, and, as by this time Beauchamp had come in at 6, the stern four began to look decidedly better and the coach was able to concentrate with more effect on the less experienced men in the boat. The crew improved remarkably, and after a good trial course two days before the race, had reason to be optimistic in spite of reports bandied about concerning certain victory for Bart's.

At the start, Caldwell got his crew neatly on to the stake-boat, whilst the Bart's cox missed twice, and this no doubt "rattled" his crew. Bart.'s, who had choice of station, selected Surrey, as they expected to lead at the start and thus would get the benefit of the bend. As it happened they led for a few strokes only. Doing only thirty in the first minute, Miller's steadiness and length in the water exactly suited his crew, and Guy's were very soon a length ahead, so that, at the bend, Bart.'s, instead of being well up, were down; their cox did not improve matters by taking them far too close to the Surrey shore; whilst at one time he very nearly crashed a moored barge, and during this period it was disheartening work for Jamie, who was keeping up a continuously high rate of striking in the effort to reduce Guy's lead. His crew, already rattled at the start, and now thoroughly alarmed, began to get unsteady and to a large extent lost their grip of the water, whilst never once during the race did they really get together as they were reported to have been during practice. Caldwell, of Guy's, steered an exceptionally good course, and Miller, maintaining his habitual steadiness, was getting plenty of swing and leg drive out of a crew rowing at the top of their form. Guy's repeated admirably their performance of the previous Wednesday, and never looked the least like being overhauled. By Fulham Football Ground they had 3 lengths' lead, and Jamie's repeated spurts were making no impression, and at the end Guy's were comfortable winners.

The win was entirely unexpected by many and it was largely due to the stroking of Miller, described by one good judge as about the best Old Pauline oar of the present day, and to the backing up at 7 of Keele, thought by another sound critic to be one of the best men seen lately on the Putney reach.

Be that as it may, there were many good men and true in the Bart.'s eight, and they had had the advantage of coaching by F. W. Law, the Cambridge Blue; they were not well served by their cox, but their beating was a fair and square one, and was celebrated in the usual manner by the crews at dinner.

The greatest thanks are due to Mr. Hylton-Cleaver, of the L.R.C., for taking on the regular coaching of the Guy's eight. We undoubtedly owe a great part of our success to his painstaking and highly efficient efforts on our behalf during the last few weeks of our training.

Crew.—A. S. Gough (bow), 9st. 2lb.; C. K. Colwill, 10.2; A. Tom, 11.5; E. T. Clifton, 10.6; K. O. Parsons, 13.6; I. C. P. Beauchamp, 12.10; K. S. Keele, 12.2; F. C. Miller (stroke), 12.10; W. A. Caldwell (cox), 9st.

Junior Fours.

This race was held after the Eights had been rowed, Bart.'s again being our opponents. Both crews were largely inexperienced, and our crew had only been got together about a fortnight before the race and, in fact, had used their light boat only for a week previously. The Bart.'s crew got away at the start and maintained their lead, despite one or two gallant efforts of our crew to catch them up. Bart.'s drew further and further away and won easily. However, despite their defeat, our crew made an extremely fine effort, and some of the members showed great promise for future years. Mr. Landon deserves great praise for his keenness and for the energy he inspired in his crew during training.

Crew.—J. C. Young (bow), W. C. A. Ford, E. C. H. Huddy, G. S. Landon (stroke), A. S. Gough (cox).

Race with University College and Hospital.

This event, a friendly race in eights, took place on Wednesday, May 16th. The weather conditions were extremely bad, even for Putney. In fact, the water was so rough that it was finally decided to wait till the turn of the tide, as then with a following wind the conditions were expected to be more suitable. This worked out very satisfactorily, and the race was rowed at about 4 p.m. from the Mile Post to the University Stone in comparatively calm water.

Mr. G. W. Rowe, who coached the U.C. & H. boat, acted as starter, and Mr. H. A. Cowan, their Hon. Secretary, acted as distance judge. No stake-boats were used. The U.C. & H. boat got slightly ahead on their first two or three strokes, but Guy's, rowing a somewhat faster rate than in their previous race, soon got the lead, and after the first minute, Miller dropped to a slower stroke, which suits his crew much better, and gradually drew away from the U.C. & H. boat. Despite a very creditable spurt from their opponents towards the finish, Guy's won by the comfortable margin of $2\frac{1}{2}$ lengths.

Crew.—A. S. Gough (bow), C. K. Colwill, A. Tom, E. T. Clifton, K. O. Parsons, I. C. P. Beauchamp, K. S. Keele, F. C. Miller (stroke), W. A. Caldwell (cox).

Water Polo Chats.

Goalkeepers.—Although the most obvious duty of the keeper is the saving of goals, this is by no means his most important office. The aim of his side is to manœuvre one man into such a position that he can shoot, i.e., unmarked, and the keeper can materially assist in bringing this about, initiating many attacks from his own goal mouth by accurate throwing out. When an opponent is about to shoot, if the marking back is unable to prevent him he swims rapidly away from his man, so that he is unmarked; thus, should a goal-throw result, the keeper has a man unmarked to whom he may throw the ball; should he save, he puts the ball some few inches in front of his unmarked back, who is now swimming hard upfield. It must be remembered that if an opponent attempts to rush the keeper when he is in possession, there is at once a home back left unmarked, and the ball may with ease and safety be at once "lobbed" to him for clearance; so that there need be no hurry in throwing out, on the contrary the keeper must look around and see where he can to best advantage put the ball. Two things must the goalkeeper remember in throwing out, firstly, that he may not throw beyond the half-way line, and, secondly, that he must put the ball in front of his back; what more disheartening to the sprinting back than to find the ball fall short, and his now unmarked forward reaching it first? Of the actual saving, one thing only need be said, it is inadvisable to attempt to hold the ball from a shot, as it may slip through the hands; it is easier and safer to pat the ball smartly on to the water, whence it will bounce on to the flat of the hand ready for throwing out.

Swimming Club.

In the first match of the present season a weak side lost to Cambridge University, away, by 4 goals to 1, and by 3 events to 1. Wakeford scored for Guy's, and Theis won the quarter mile by over half a length, in 6 min. 31 secs.

Other matches—

v. Old Citizens, Pitfield Street, lost 2—3 (Brown, Theis).

"A" v. Old Citizens "A," Pitfield Street, drawn 2—2.

v. St. Paul's School, West Kensington, won 1—0 (Theis).

v. R.M.A., Woolwich, won 5—1 (Bekker 3, Brown 2).

v. Old Blues, Pitfield Street, lost 0—2.

"A" v. Old Blues "A," Pitfield Street, won 5—0.

v. L.S.E. (Semi-Final University Cup), won 5—0 (Brown 3, Wakeford 1, Theis 1).

v. War Office, Pitfield Street, won 5—0 (Brown 3, Bekker 1, Wakeford 1).

Lawn Tennis.

The First Round of the Senior Inter-Hospital Challenge Cup between Guy's and The London was played on May 25th. Owing to bad weather the match was played on the North London Hard Courts, at Highbury.

It was a very keen and close match—the score being Guy's 8 matches, The London 7.

Singles.

Nurick beat Hart, 7—6, 6—1.
Jackson lost to Peterson, 2—6, 6—4, 6—4.
Lewis-Philipps lost to Brown, 1—6, 8—6, 6—3.
Neser lost to Dix, 4—6, 6—3, 6—3.
Schlimmer beat Isaacs, 6—1, 6—2.
Badenhorst beat Nawser, 6—1, 6—2.

Doubles.

Nurick and Jacobsz—
Beat Nawser and Isaacs, 6—2, 6—1.
Lost to Brown and Dix, 4—6, 7—9.
Lost to Peterson and Hart, 1—6, 4—6.

Jackson and Neser—
Beat Brown and Dix, 7—5, 6—3.
Beat Nawser and Isaacs, 6—0, 8—10, 6—3.
Lost to Peterson and Hart, 3—6, 3—6.

Schlimmer and Lewis-Philipps—
Beat Brown and Dix, 4—6, 6—1, 6—1.
Beat Nawser and Isaacs, 6—3, 6—3.
Lost to Peterson and Hart, 6—3, 4—6, 1—6.

Badenhorst played singles instead of Jacobsz.

JUNIOR INTER-HOSPITAL CUP.

This was played against the London at Honor Oak Park, on May 24th, resulting in a win for Guy's by 13 matches to 1.

The team put up an excellent show as may be concluded from the result.

Team.—E. V. Potts and N. L. Sharpley; P. Bekker and J. W. Schollum; D. R. Grant and Yew.

WHIT MONDAY TOURNAMENT.

This was got up in aid of St. Dunstans. The proceeds amounted to £3 12s., which they have acknowledged with much appreciation.

The Committee wish to thank all the ladies who provided such an excellent tea, which was greatly enjoyed by all, also those who helped to run each section.

We heartily congratulate the winners, V. Boyle and Sister Nian, also the runners up, D. R. Grant and Sister Burton.

Members who have entered for the Lane-Washburn Cup are requested to do their utmost to get the rounds finished by the dates named on the draw, which is posted near the entrance to the Colonnade.

Blues Committee.

A meeting of The Blues Committee will be held on Monday 18th, Classroom 2, at 1 o'clock, to discuss recommendations and any other business.

W. H. FOY,
Hon. Sec. Blues Committee

Rugby Football.

"A" XV.

RESUMÉ OF PAST SEASON.

In spite of the very heavy demands made on the team for players to fill vacancies in the 1st XV. throughout the greater part of the Season, the "A" XV. were successful in winning the Kent County Cup and retaining the Junior Inter-Hospital Cup.

Of seventeen matches played during the Season twelve were won, four lost and one drawn. A rather large proportion of matches were scratched owing to unforeseen circumstances.

Every member of the "A" XV. played for the 1st XV. on more than one occasion and several were called upon to assist the Senior team in most of their matches. The experience of first class play so gained was invaluable.

In connection with the Kent County Cup the "A" XV. wish to express their appreciation of the true sporting spirit shown by E. L. Spong who, although far from fit after an illness, turned out for the 1st against Plymouth Albion, thus enabling the "A" XV. to be at full strength for the Final which was played on the same day.

The following Officers were elected at the beginning of the Season:—H. W. Close, Capt.; S. P. Jacobson, Vice-Capt.; H. K. Williams, Hon. Team Secretary.

Guy's Hospital Athletic Sports.

100 yds. scratch 1 C. L. Steyn; 2 G. K. Lacey, 10⅗ sec.
220 „ 1 C. L. Steyn; 2 G. K. Lacey, 22⅘ sec.
440 „ 1 C. L. Steyn, 57 sec.
880 „ 1 A. S. Gough; 2 E. L. Gross, 2 min. 7⅘ sec.
1 mile scratch 1 L. G. Housden; 2 M. E. Jago, 4 min. 51⅕ sec.
3 miles scratch 1 L. G. Housden; 2 M. E. Jago, 16 min. 37⅕ sec.
120 yds Hurdle 1 H. S. Selby; 2 W. Leslie, 19½ sec.
High Jump 1 W. S. Badenhorst; 2 W. Leslie, 5ft. 3½in.
Long Jump 1 C. L. Steyn; 2 W. S. Badenhorst, 19ft. 11in.
Throwing Hammer 1 E. W. Hutchinson, 2 G. G. T. Tregarthen, 75ft. 9in.
Putting the Shot 1 E. W. Hutchinson; 2 G. G. T. Tregarthen, 33ft. 11½in.
Winner of Clement Lucas Challenge Cup—C. L. Steyn.
100 yds. Handicap 1 G. K. Lacey, 5 yds.; 2 G. Fellows-Smith, 7 yds.; 3 H. S. Selby, 8½ yds., 1½ yds., 1 yd., 9⁹⁄₁₀ sec.
220 „ 1 G. K. Lacey, scr.; 2 G. Fellows-Smith, 10 yds.; 3 H. S. Selby, 12 yds., 2 yds. 1 & 2, 1 yd. 2 & 3, 24 sec,
440 „ 1 J. L. Faull, 12 yds.; 2 A. S. Gough, 8 yds.; 3 R. Cleary, 22 yds.; 3 yds. 1 & 2; 2 yds. 2 & 3, 54⅘ sec.
880 yds. Handicap 1 A. S. Gough, scr.; 2 W. Osmond, 25 yds.; 3 J. L. Faull, 10 yds.; 4 yds. 1 & 2, 2 yds. 2 & 3 2m. 8⅕sec.
1 mile Handicap 1 M. E. Jago, scr.; 2 H. S. Fuller, 100 yds.; 3 J. L. Faull, 10 yds.; Easily, 3 yds. 2 & 3.
3 mile Time Handicap—1 M. E. Jago, 30 sec.; 2 L. G. Housden, scr.; 3 S. K. Arnold, 1 min.
Winner of Tug of War.—Wards.
Winner of Relay Race.—Dentals.

Papers by Guy's Men.

C. P. Symonds, M.D., M.R.C.P. Lumbar Puncture and Examination of the Cerebro-Spinal Fluid.—*Clinical Journal*, lii., 1923, p. 241.

R. D. Moon, M.D., F.R.C.P. The Economic Aspect of Heart Disease.—*Brit. Med. Journ.*, 1923, i., p. 922.

——. Heart Disease and Occupation.—*Clin. Journ.*, lii., 1923, p. 261.

H. C. Cameron, M.D., F.R.C.P., and A. Osman, M.R.C.S. Empyema in the first two years of Life, with a discussion of the value of Immediate Resection of Rib.—*Lancet*, 1923, i., p. 1097.

A. Ll. Spencer-Payne, M.R.C.S., L.R.C.P., L.D.S. A Note on the Condemnation of Crowned Teeth.—*Brit. Dent. Journ.*, 1923, p. 565.

C. Worster-Drought, M.D. Case of Enlarged Liver with Persistent Acetonuria and Diaceturia. Proc. Roy. Soc. Med., xvi., 1923, Sec. for the Study of Dis. in Children, p. 56.

Philip Turner, M.S., F.R.C.S.. Case of Excision of an Adenoma of the Liver for Malignant Disease Spreading from the Gall-Bladder. *Ibid.*, Sec. of Surgery, p. 59.

A. Ralph Thomson, Ch.M., F.R.C.S. The Proprietry of Attempting to Secure Primary Union after Operations upon the Bladder and Prostate. *Ibid.*, Sec. of Urology, p. 47.

Change of Address.

F. A. Knott, M.D., D.P.H., Rushmere, Southside, Wimbledon Common, S.W. 'Phone: Wimbledon 1464.

Birth.

SAWDAY.—On May 25th, at 29, Hartingdon Street, Derby, to Winifred (née Amos), wife of A. Ernest Sawday, M.B., B.S. (Lond.), a daughter.

Marriage.

RANSFORD—POOLE.—On May 18th, 1923, at Clifton Parish Church, William Reginald Ransford, of 14, Upper Wimpole Street, W., and late of Rangoon, Burma, eldest son of the late William Ransford, of Druid Stoke, near Bristol, and Mrs. Ransford, of Westbury, to Renee, youngest child of Mr. and Mrs. O. A. S. Poole, of Clifton, Bristol.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

THIS number of the GAZETTE appears on Midsummer's Eve. We discovered this momentous fact by accident, while arranging the holly on our overmantel. With hands shaking from the cold, we attempted to tear yesterday's "Great Thought" from our Calendar and tore off everything down to "Sunday, June 24th—Midsummer Day." The news came as a great surprise, although we already knew of summer's official advent; for, as in the country the swallow is the harbinger of spring, so in the College is the summer heralded by the sweep. Be the weather what it may, once the sweep has passed his bristly bougie up the College chimneys, summer, radiant summer, is here and the perished scholar could as easily tap the cephalic vein of a newborn infant for blood, as the hard heart of the sweep-slipper for fire-wood.

With our newly-gained knowledge and an extra cardigan, we ventured into the Park to view the midsummer revels. The usual scenes were missing. At this time of the year one expects the lawn to be covered with decumbent students, meditating, with all the concentration of Indian fakirs, on the great and glorious art of healing. But this year the turf has a forlorn aspect, save where an occasional hustler walks rapidly over the newly-sewn grass. Even the enclosure, "reserved for the nursing staff only," is deserted and the broad walk is bare of babies. Summer only appears in the youthful faces of some newly-fledged pigeons, who proudly strut and volplane from place to place until such time as they fall victims to one of the Hospital cats.

The lack of warmth may, however, be a blessing in disguise, as the Residents scorn to play stump-cricket on a drying pitch, and His Royal Highness the Prince of Wales, when he comes to open the new Anatomical Department on Monday week, may find us at our greenest. Those who have not already applied for tickets, and who desire seats for this ceremony, should apply for them at once at the Medical School Office. The band of His Majesty's Coldstream Guards will play during the afternoon, tea will be served in the Park and much prestige will be gained by those, who escort their female relatives round the Hospital and are the possessors of ready and unscrupulous tongues.

Now that the Anatomy Department is moving into its new quarters, we understand, quite unofficially, that the Baby Ward is to be ex-

tended to occupy the space lately used by more gruesome inhabitants. This is, perhaps, the most needed extension in the Hospital at the present moment. It is the fate of woman to spend a large part of her life in close proximity to howling infants, but our short experience of the women's wards has shown us that, when ill, they bear their fate with but a poor pretence of resignation. Anything more distressing to a sleepless invalid than the continuous crying of suffering and irritable children it is difficult to imagine. An enlargement of the Bermondsey and Rotherhithe War Memorial Ward would do away with this distress and if, at the same time it lessened the attraction of the general wards for clerks, it would in consequence enable them to complete their daily ward-routine in half the time.

WHILE alterations are going on within the Hospital, St. Thomas' Street itself is being thoroughly overhauled and renovated and it seems clear that the locality is to have either the largest sewer or the smallest tube railway in London. Pipes of enormous calibre are being buried along the front of the Hospital, while houses are being totally destroyed at the Borough end of the street. Walls crash to the ground and doors and windows tumble out, but a notice announces that business is carried on as usual in the "Imperial" Hotel. Next door, alas, business is altogether at an end. Gone is that irreplaceable bazaar, so rapidly becoming a menace to Messrs. Down Brothers, for who would pay seven and sixpence for a tape measure, when the same article, or at least as useful an article, could be procured at the emporium for threepence halfpenny? It is now with no little trepidation that students watch the other side of the street, where also are two shopping centres of the greatest value to the district.

WE would direct the attention of those who would escape the turmoil of this wider London, to a letter, appearing elsewhere, on the subject of the European Student Relief Society. The object of this Society is to be at the service of Undergraduates of the Universities of Europe, to assist them, with advice and local knowledge, to travel to countries other than their own, where without assistance they might find the journey a very irksome one. The letter needs no amplifying by us; we merely draw attention to it.

WE extend our heartiest congratulations to Mr. G. V. Odey, of University College, who was, on Tuesday, elected unopposed as President of the University Union, and to Mr. H. G. Anderson, of Bart.'s, who headed the poll in the election of Vice-Presidents.

WE print in this number the paper, by Mr. E. R. Boland, which has been awarded the Physical Society's prize for the best paper read before the Society during the last year. We congratulate him both on gaining this much coveted prize and also on having written a paper of a quality and individuality quite unusual.

AMPLE notice is given, in a letter from the Honorary Secretary, of the Biennial Dinner, to be held at the Connaught Rooms on Wedday, October 17th. A list of the Vice-Chairmen, who will preside over separate tables, is given so that Guy's men may, by applying for seats at a particular table, be assured of sitting with their old friends. The Biennial Dinner is always a most successful and enjoyable event and all Guy's men are asked to help the Honorary Secretary in making the forthcoming one the greatest success of all.

The Psychology of the Tuberculous.

All chronic disease produces, as is but natural, profound changes in disposition. The depression of the chronic dyspeptic, the hot temper of the liverish and the perversion of the prostatic are commonplaces to us all. Sydney Smith pointed this out in the following words:—

"Half the unhappiness in the world proceeds from little stoppages, from a duct choked up, from a vext duodenum or an agitated pylorus. The deception as practised on human creatures is curious and entertaining. My friend sups late, he takes strong soup, he eats a lobster, then a tart, and dilutes these esculent varieties with wine. The next day I call upon him. He is going to sell his house in town and retire into the country; he is alarmed for his eldest daughter's health; his expenses are hourly increasing and nothing but a timely retreat can save him from ruin. All this is the lobster and, when over excited nature has had time to manage this testaceous encumbrance, the daughter recovers, his finances are in good order and every rural idea effectually excluded from his mind. In the same manner old friendships are destroyed by toasted cheese, and cold salt beef has led to suicide."

Is there a psychology characteristic of the tuberculous? Had I asked myself this question one year ago, my answer would have been unhesitatingly in the affirmative, and had I written this paper at the same time, I should have been able to set down an attractive picture, all cut and dried, unblushingly dogmatic and scrupulously and sedulously devoid of fact. Unfortunately or fortunately I read a book by a man whose nom de plume was W. M. P. Barbellion, called the "journal of a disappointed man."

It is the faithful, the too pitifully faithful, record of the daily thoughts and acts of a young and brilliant naturalist, who died at the age of 30, in the long and painful course of a disease which, from some of the symptoms described, may have been "disseminated sclerosis."

At first sight the connection is not obvious, but it becomes so when I mention that the mentality of the man was exactly that which I would have looked upon as part of the characteristic mentality of phthisis. So that unless I can prove that he really died of phthisis, I have to differentiate between the psychology of the tuberculous and the psychology of tuberculosis. That is to say that their psychology is part of a complex which is made up of the reaction to altered circumstances of body and of mind common to many other diseases, influenced and exalted by the condition of tuberculous toxæmia.

It must be remembered that age and still more previous disposition will affect the change in each individual. I propose to describe a picture which will include all the heights and depths of the changes in the course of the disease. None will show all of them but all will show some of them.

At the commencement, when the disease is still smouldering and when it has not yet burst into flame, there is, in many cases, no appreciable change. In others, its ravages really already far advanced, appear manifest in a sudden explosion of intellectual development. The subject's reasoning faculties, his critical sense, his range of thought, his command of speech often blaze up with dazzling brightness which is the more marked when compared with his slowly failing physical forces. His growing pallor, his failing appetite, his rapid wasting throw the brilliance of his intellect into greater relief. At the same time, he often becomes restless and irritable, forming innumerable plans, some of which he carries out, others he abandons as soon as projected. Nothing pleases him for long; he feels little pleasure in the realisation of his desires. Once attained, all interest is lost. He is never happy in one place; he must always be moving, acting, doing something. Often he throws himself with the restless vigour with which he pursued his business or his profession, into the pursuit of pleasure, tiring quickly of one, he tries another, never stopping for a moment, always in a hurry. So much is this so that worthy people, putting the cart before the horse, often say "I told you so" with extreme unction when his disease becomes manifest.

It is at least probable that his excesses sexual and otherwise, which have so often been noticed, are due to the cerebral irritation of the tubercular toxins and his intermittent fever.

The patient at this stage is really suffering from chronic intoxication. His state of mind is that of ourselves when our temperatures are raised through some slight infection. As we lie in bed, turning first on one side and then on the other, thoughts rain upon us thick and fast, no sooner come than gone and followed by others equally evanescent; trifles loom enormous in our mind while important matters seem infinitesimal, and we consign them to the far distant limbo, which is to-morrow. We turn and toss restlessly, trying to escape our thoughts and so sleep, trying to visualise what it can be like to be at rest and feel ourselves again. In the morning we faintly remember the cloudy phantoms of the night before and wonder how they could have worried and disturbed us. So it is with the consumptive, but for him day and night are alike, and for him there is no to-morrow to bring him rest.

Fischberg has compared the consumptive at this stage to a man slightly under the influence of alcohol. The bright eyes with dilated pupils, the flushing cheeks, the flickering intellectual brilliance even in those who were not so marked before the onset of the disease, the flashing wit, the restless energy followed by mental depression and fatigue, bear out the resemblange in striking manner. The effect on the intellect is of course most marked in young and talented individuals, and of its influence on genius I will speak later.

The consumptive at this stage often surprises and attracts his friends by his humour and charm and his sensitiveness and delicacy of perception are often extreme.

It is true that his charm is often reserved for his friends; with his family he is often hasty and impatient. He is easily irritated by trifles, resenting disturbance with the cramping necessities of life. Often the subject is unaware of this sort of intellectual bonfire: at other times he is aware of something which he cannot resist, and is already made unhappy by his restlessness and inconstancy of purpose.

The phase of excitement does not last long. With the advance of the disease and worn out by the feverishness of his life, the periods of intellectual stimulation become shorter, the aftermath of inevitable reaction longer and longer. He becomes incapable of sustained effort, and the flames of his intellect, as if exhausted by the fierceness of their burning, give a few feeble flickers and then are smothered by weakness and indifference. The man who had no thought for himself but only for his work, his studies or his friends, is monopolised by his ever more insistent body and the heart-stopping fear of ignominious death: the man who thought only of science, of poetry or of art, is reduced to thinking of nothing but his appetite, his night sweats or his cough.

From this apathy of mind to anything that does not concern his body, he is only aroused by fits of rebellion and active revolt against his condition which eventually become less and less frequent until, worn out with the struggle, he acquires a sort of cynical, half-contemptuous sadness which is portrayed, I am told, on the face of Monna Lisa, la Joconde. But even to the end, when little remains but the burnt out wreck of what was once man, he nearly always retains his intellect unimpaired and in the last stages, in spite of the reassurances of their doctors and relatives, they often show an uncanny and disconcerting realisation of their imminent death. Even if their minds can think of nothing but themselves, they have as a rule no illusions about their own body. They retain the attitude of the dying man who said after his doctors had replied "It is well" to his account of all his most serious symptoms, "Faith, by being well I die."

Some consumptives go through the whole of their illness without any change in their characters. If they were courageous and light-hearted or sober and resigned, they will often go through their illness to the end, unchanged, unaffected by the horrible circumstances of their living death. But these are few in number. All consumptives go through a period of mental strain when their disease becomes manifest and their danger obvious. They commence with a feeling of bewilderment and vague injustice. They cannot believe that they have been stricken down by the disease they have so often heard of but have never visualised as overcoming themselves. They fail to see why they, in the full vigour of their lives, should be suddenly checked: why they should have to abandon their plans and their ambitions while their healthy friends go scot free. With realisation comes despair, and with it revolt and violent rebellion of mind.

From the mental conflict they emerge, the one brave and self-reliant, the other angry and embittered, still another frightened and cowed, and some still furiously and impotently railing against their fate. Whatever the state in which they emerge from the crucible of their fears, desires and regrets, the tendency is for them to drift towards the egoism which is so characteristic of the confirmed consumptive. That they should be egoistic is not in the least surprising. As I have said, the state of the consumptive is the state of the mildly intoxicated: in other words, the normal man freed from some of his repressions of education and training, so it would be strange if the egoism, which is the bedrock of human character, were not eventually to dominate the picture, and surely there is sufficient in the condition and the surroundings of many patients to produce self-contemplation in even the most self-controlled of men. It is the outside impressions which help to drive the consumptive into this contemplation of himself. The consumptive is morbidly sensitive, and while his friends are often harmfully sympathetic and over-considerate, what he considers the blatantly healthy attitude of the rest of the world excites in him feelings of defiance and isolation. He begins to realise for the first time the meaning of the term "Survival of the fittest." He is one of the victims of civilisation, and he feels that from it he should receive help and encouragement. Instead he becomes morbidly conscious of the remains of an attitude towards the tuberculous which was at one time universal. Many people at the present time will still affirm, with positive pride, that their father died of an aneurism or that their mother had fifteen abortions, who will

steadfastly conceal the fact that their sister is "in consumption."

The patient, as a result of a succession of impressions rather than any concrete facts, feels an outcast. If he is in lodgings he is given notice to quit, and even educated people often show concern at his entry into their houses. If his fellow workers discover his disease, he is often forced to leave his occupation; if he is engaged, he is constrained to break off his engagement; and if he ever reveals the fact that he has been to a sanatorium, his chances of getting lodging or an occupation are limited indeed. So that, from the first, he is driven to concealment and deceit. He is told that he is a danger to children and that his own should be sent away from him, that he is a danger to other people and a nuisance to the State; if he tries to emigrate, he is turned back, while his convict companion emigrants are allowed to pass, and if he reads the newspapers he finds that he is a social problem which can only be solved by ruthless segregation and compulsory sterilisation. Finally, if he tries to unburden his mind or confide in his healthy friends, he is told that he is morbid or is met with overburdening pity which is to him worse than hostility. All this real or imagined hostility hurts him and, combined with the fact that he has had to give up all that makes life worth living for him, his affections, his work and his pleasures, it is small wonder if he emerges from the ordeal feeling either that he can only depend on himself, and that if he does not look out for himself no one else will, or that nothing remains for him but his religion and the next world.

This ultimate egoism, however, is not given way to, at first, by the majority of consumptives at all events. The average man when once he has realised his position, faces it bravely and resolves to carry out the treatment which he has been told will, if faithfully and loyally carried out, probably lead him back to health. It is only when relapse has followed relapse and promise after promise has proved empty that his character begins to bend under the strain. He becomes selfish and suspicious even of those who are trying to help him. Gradually "Melancholy marks him for her own," and as the disease gets a closer grip upon him, he shuts himself up in himself. Sad, morose and secretive, he builds around himself a wall of reserve, and like a hunted animal hides himself in seclusion and gives himself up to introspection and the fear of death. Alone, indifferent, moody and hostile, he spends whole days silent and unapproachable, enjoying the sun and the fresh air, concealing, even from his doctor, the advances in his disease lest he be deprived of his liberty and sent to bed to lose what little enjoyment life still affords him. His misery and dread are the more that often he knows himself to be worse than his physician thinks, since he has lied to him again and again, as he knows that the confession even of a very transient relapse will set his whole treatment back where it was at the beginning, and since he already himself despairs of the ultimate result, deprive him even of a peaceful end to his sufferings. Many a hæmoptysis is concealed from the physician; many a temperature chart falsified, and the patient's fear is aggravated by the repression.

This reserve and moodiness of the advanced consumptive is often very striking. I lived at one time with a doctor suffering from advanced phthisis. He was one of the wittiest, most generous and most open-hearted of men when he was well, but when his temperature was raised or he was in one of his fits of depression, the change was as remarkable as the metamorphosis of Dr. Jekyll and Mr. Hyde. He would sit gazing straight in front of him, alternately stroking one flushed cheek and then the other, for hours at a time. If spoken to he either did not answer or answered with a shake of his head. At intervals one would see him slip a thermometer into his mouth, surreptitiously read it and, with increased agitation and a flushed face, go on stroking his cheeks. During these fits, he became jealous, suspicious and easily irritated by the merest trifles, with the result that the medical officer and I were forced to flee the room if we were to retain our spirits and sanity.

After all, this secretive attitude is merely the natural result of the physical injury comparable to the way in which the injured animal withdraws himself from the herd to die alone. Once the consumptive becomes selfish, he never looks back; he rationalises everything; he considers that, after all, he is being cheated of life, and that in the short time that is left to him he is entitled to everything for his pleasure, so that he accepts everything that is done for him, every sacrifice made by his friends or relatives as his due. No outside topic has power to divert him from consideration of his symptoms or his comfort. If he is kept awake by the incessant coughing or spitting of his fellow sufferer, his indignation knows no bounds; he knows no sympathy for him except that by his impending death he is reminded of his own. To the gloomy reserve which he uses as a carapace, he often adds a bitter cynicism. He sees or affects to see to the bottom of every action or sentiment, he is for ever seeking to destroy illusions and to belittle motives.

On the other hand some, finding the burden too much for them to bear on their own shoulders, become deeply religious and throw their worries and troubles from them. But these are the fortunate ones and often the weaker ones, and the change is frequently not one of conviction but merely because the strain has become intolerable.

The picture I have attempted to draw of the unrelieved sadness of the consumptive is not the one conventionally depicted in text-books. So called "Spes phthisica" is, in my opinion, more often found in books than in real life. Certainly it is found in some cases, but as a rule it is, I think, more the contrast between the ignorance of some about the gravity of their condition and the certain knowledge which the doctor alone possesses through his experience, rather than any exaltation on the part of the patient. He has been ill for so long and has had so many relapses that the terminal change is not markedly different from any previous exacerbation of his disease. Not only that, but in the terminal stages, when his immunity is gone, many of his most urgent symptoms leave him so that he actually feels better. Most of the patients whom I have seen dying of phthisis who showed any signs of "Spes phthisica" were either patients of a very ignorant type or else of a type whose original courage and buoyancy were sufficient to bear him up even to the end.

I watched one young man of 27 die of the disease. He had been dying for twelve months when I first saw him, and I watched him for six months. When I first knew him he had been in bed for weeks, often so feeble that he could hardly lift his hands to get his sputum mug, with a hectic temperature and extreme weakness and anorexia. He was a young man with an income of his own, and of exceptional intellectual gifts and promise. In spite of his condition, at least when he was not too worn out or on the rare occasions when a fit of depression overcame him, he never lost his smile or his witty, caustic and cynical comments on life in general and himself in particular. He was as clear-eyed about his imminent death as you or I are that we will all die some day. His attitude to life did not arise from light-hearted gaiety, irrepressible in spite of his illness, but from a deliberate effort of his will to overcome his inherent bitterness and melancholy. He was determined to die fighting, and he carried out his determination to the inevitable end.

Doctors, nurses and others are supposed to show "spes phthisica" more than other people. This, if true, I can attribute only to their naturally courageous attitude towards the disaster which has overtaken them, and is due to a pose rather than to exaggerated belief in their recovery. In passing I may say that my experience has been in a contrary sense. At any rate if you have any doubts about cheerfulness and optimism not being a characteristic condition in pulmonary tuberculosis, I would suggest a visit to the consumptive wards of an infirmary which is rather less cheerful than the morgue and slightly less hilarious than a cemetery. As to the effect of the tuberculous toxin on genius, the same remark applies that I made at the beginning. I do not suggest that tuberculosis necessarily causes genius (although I have it in my mind that it may), but I do suggest that it influences and exalts it. The names of great musicians, scientists and artists and writers who have died of tuberculosis is a very long one, and it suggests at least that the disease is very common amongst talented people. I will only mention a few of them: Rousseau, Shelley, Emerson, Chopin, Laennec, Koch, Keats, Charlotte Brontë, Ruskin, Molière, Calvin, Watteau, Francis Beaumont, Lovelace, Voltaire, Paganini, Schubert, Gorky and Tchekov, to mention a few only out of the long list. A superficial glance at the names suggests one thing. The genius of all these men and women lay in the brilliance of their imagination, in the sensitiveness of their disposition, in their love of colour or life, or in their bitterness, cynicism and jealousy. No one would expect Euclid or Nietsche to be consumptive. Tuberculosis does not as a rule produce mathematicians, historians or scientists, although Laennec, Koch and Froude stand in contradiction of my statement.

It is true that the sensitiveness of the consumptive is often that of Sterne (himself a consumptive), as described by Byron, namely that "he was of such sensitiveness of nature that he would spend himself in floods of tears over a dead donkey while he left his old mother to die in the gutter."

In the genius who is stricken with the disease, the mental exaltation is greater than that of the ordinary mortal. His revolt is the greater as he knows what he is losing, since he appreciates life in a way that no one else can appreciate it. He is fighting against time, using the very forces that are hurrying him to the grave to lash his inspiration to greater efforts. Fighting and hammering fruitlessly against the bonds of his growing weakness, he batters his head against the wall of his disabilities, and worn out by the feverishness of his production, he dies a premature death with half his message undelivered. Such a man was Keats, who died at the age of 25. Some words of his suggest in some slight way his melancholy and his feeling that death would overtake him before he had written poetry that would live after him, as for example in a poem found amongst his effects after his death:—

"When I have fears that I may cease to be
Before my pen has glean'd my teeming brain,
Before high-pilèd books in charácting
Hold like full garners, the full-ripened grain.
When I behold upon the night's starr'd face,
Huge cloudy symbols of a high romance,
And feel that I may never live to trace
Their shadows, with the magic hand of chance;
And when I feel, fair creature of an hour!
That I shall never look upon thee more,

Never have relish in the faery power
Of unreflecting love;—then on the shore
Of the wide world I stand alone and think
Till Love and Fame to nothingness do sink."

Or again in his "Ode to a Nightingale":—

"Fade far away, dissolve and quite forget
What thou among the leaves has never known,
The weariness. the fever and the fret
Here, where men sit and hear each other groan;
Where palsy shakes a few, sad, last grey hairs,
Where youth grows pale and spectre thin and dies,
Where *but to think is to be full of sorrow*
And leaden-eyed despairs;
Where beauty cannot keep her lustrous eyes
Or New Love pine at them beyond to-morrow."

These two poems help to lift the veil over his life, and when he coughed out his life at an age younger than most of us, he had written poetry that will live long after the very names of those who derided him.

Of the quiet melancholy of the consumptive genius, there are numberless examples. Perhaps two of the best are to be found in the "morne" stories of the Russian doctor, Tchehov, or in some of Schubert's music. The latter died at the age of 35, and on his tomb was inscribed:—

"Music has here enshrined a fair treasure but fairer hopes."

The characteristic brief blaze of genius appears to be characteristic of the tubercular genius. How much literature, how much art or music would be left if all work done after the age of 25 or 30 were to be destroyed?

The instability of character and the depression in the tuberculous suggests the line of treatment. At the present moment, apart from diet and hygiene, the only treatment of tuberculosis is by psycho-therapy. It is an axiom that a depressed consumptive will certainly die, whereas there is still hope for the cheerful one.

There can be no doubt that the success of any sanatorium depends on the personality of its superintendent. On his sympathy and understanding depend the fact whether a sanatorium is a jumping-off ground for a fresh start or a prison and a home for the dying. The success of all "specific" treatments in tuberculosis, so far, nearly all depend on psycho-therapy. If the physician gloomily injects his fluid, be its nature whatsoever it may, saying "At least it will do you no harm if it does you no good," the patient will not improve in the least. If, on the other hand, he belauds his treatment to the skies and injects it together with infectious enthusiasm and assumed optimism, the patient will often put on weight, lose his cough and symptoms and feel a different person. Injection of sterile saline would probably have the same effect.

The essential thing in treatment is to find the line of thought which will aid the patient and then to direct him along it, helping him from time to time with encouragement and sympathy.

The effect of the mind on the obliteration of symptoms, at all costs, is illustrated by the following case. A patient at a sanatorium, aged 32, had extremely advanced fibrous phthisis of both lungs with extensive coritatic and tubercle-laden sputum. He appeared extremely weak and feeble, with much dyspnœa on exertion. The superintendent sent him home as he appeared to be unlikely to live very much longer or even to be able to carry out his treatment.

I saw him before he went, and when I saw his dyspnœa, his cyanosis and his weakness, I never dreamt he would live more than a few months. Shortly before he left, he acquired a queer sort of religion, a curious mixture of the leading articles of "John o' London," Theosophy, Christian Science and the Established Church. The form is immaterial, the effect it had on his symptoms is all important. I was walking along Regent Street about six months ago when somebody ran, literally ran, after me. I turned round and saw this man fit and apparently well without a trace of dyspnœa. I expressed surprise at seeing him so well, and he said quite seriously that God had done it for him, that the cause of disease was in all of us and we ourselves could all cure it. Incidentally he attempted to connect me with, I regret to say, signal failure. This was a remarkable case. I have no doubt that the man's disease was as active or more active than ever, but that after all matters less to the individual than his symptoms, and if this man could by means of a religious short cut bring his will to bear on his objective feelings, it suggests to us to try to use our knowledge and influence to bear so as to help the consumptive in his path whether it be by the Higher Criticism or by Pagan Philosophy, and to remember that when we write on an out-patient letter

"Notify and San.

E.M. c.O.M. ʒii. t.d.s. p.c.
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that, although we are ringing down the curtain as far as we are concerned, we are ringing it up as far as the consumptive is concerned.

Change of Address.

B. C. Woodroffe, L.D.S., 57a, Wimpole Street, W.1. Phone: Paddington 3337.

J. J. Coleman, M.B., Withnell Hall, near Chorley. Phone: Brinsall 27.

Intussusception: Caput-cæci Variety.

The following case of intussusception is of interest because of the difficulty encountered in the differential diagnosis, and also because it belongs to the caput-cæci variety which was dsecribed by Sir Frederic Eve.

The baby, a first-born, was a girl aged 8 months. Breast-fed. On Monday, May 21st, she was seized with abdominal pain and vomited twice. The stools subsequent to the pain contained blood and slime. She was seen in the Surgery and referred to Baby Out-Patients. When seen the next day the baby had vomited four more times, and the stools still contained blood and slime in addition to fæcal matter. Abdominal examination disclosed nothing. On May 23rd it was thought that a lump could be felt in the region of the transverse colon. The child was admitted.

On admission to the Ward the child was found to be healthy and well covered. She was neither pale nor toxic, but had an exceptionally good complexion. When she cried it was the cry of hunger and there was no evidence that she was suffering from spasmodic attacks of pain. No lump could be felt on abdominal examination. Rectal examination was negative, but on withdrawing the finger the baby had her bowels well opened—the stool being somewhat loose and consisting of fæces intimately mixed with slime. It was decided to keep the baby under observation.

She was put back on the breast and appeared to be perfectly well for the remainder of the day. The next morning she again vomited twice. The bowels were not opened during the night and the baby still looked very well. On abdominal examination an indefinite lump could be palpated lying transversely above the umbilicus. A little later the child passed another stool containing fæces.

Mr. Slesinger was asked to see the case, and examined her under an anæsthetic. It was only after a very considerable time had been spent that the lump was found and on this occasion it was lying just above the pubes. The lump was freely moveable and difficult to find again once it had been lost. Operation was immediately performed and an intussusception found. The intussusceptum consisted of the portion of the cæcum lying between the anterior and the external tæniæ, and neither the appendix nor the ileo-cæcal valve was involved. The intussusception, although small, formed a definite mass, and, in addition, had a distinct "neck." Reduction was easy. The abdominal wall was closed and the baby was returned to bed. Recovery was uneventful.

The large quantity of fæcal matter that was passed in this case is explained by the fact that the intussusception was not causing obstruction. The colour and general good condition of the patient may be similarly explained.

Perrin and Lindsay in a very careful investigation into the subject of intussusception (*British Journal of Surgery*, July, 1921), deduce the fact that all caput-cæci intussusceptions are in reality ileo-cæcal, and that the dimple found in the cæcum in so many cases after reduction, is always a secondary result of the ileo-cæcal variety. The above case illustrates the fact that the caput-cæci variety does exist as a separate entity. It would be incorrect to suggest that the intussusception as found was the remainder of an ileo-cæcal intussusception which had been reduced naturally, because neither the valve nor the appendix appeared in the least indurated or inflamed, and one has to consider the fact that there was a definite cæcal intussusception with a neck and not merely a cæcal dimple. Again, if it had been one which had reduced itself thus far, the fact remains that there was still an intussusception left to be reduced, and if the cæcum was the last bit to be reduced it was probably the first to be formed, and so the case must once more be placed in the caput-cæci variety.

I am indebted to Mr. Steward and to Mr. Slesinger for their kind permission to report this case.

J. G. J.

Appointment.

H. Cory Mann, O.B.E., M.D., M.R.C.P., to be Honorary Consulting Physician, St. John's Hospital, Lewisham.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Dental Bacteriology in Dental Procedures.

A CLINICAL LECTURE BY ARTHUR BULLEID, L.D.S., M.R.C.S.

GENTLEMEN,—I have taken as the title of my paper this morning "Dental Bacteriology in Dental Procedures," because I feel that sufficient use is not always made of the bacteriologist in dental surgery and that some explanation of how he can assist may be of some interest.

Dental surgery has not stood still in the last decade and progress has brought added responsibility to the dentist. He is no longer looked upon merely as a "tooth extractor or tooth repairer," and the public as well as the practitioner realise that there is a higher rôle to play and that the dental work done may and very often does have far-reaching effects on the entire constitution.

The connection between oral sepsis and constitutional disease is too well proved to require any elaboration here, and for this reason the dentist has a far more exacting duty to perform to his patient than was at one time expected.

It is, therefore, essential that he should have at his command other resources than his own clinical skill, and it is to give added help on questions of difficulty that the dental bacteriologist comes in.

At present the bacteriology of the mouth is far from complete, but sufficient is known to make the laboratory findings of some definite importance. I would ask you to remember here that dental bacteriology is not by any means entirely confined to the mouth, because the infecting agents in the mouth do not always remain local, but spread to other parts of the body and must be sought for there.

Therefore let us now go a little into the detail of the work of the bacteriologist in his attempt to help the dental surgeon.

Most people—and I hope that dental students and practitioners are no exception to the rule—appreciate the fact that it is much easier to treat a dental lesion if the cause is made manifest, and therefore the value of an almost routine bacteriological examination in most cases cannot be exaggerated.

Let us take as an example the case of the patient who comes to the dentist "because the gums bleed." Clinically the condition is only one of "marginal gingivitis," and the dental surgeon proceeds to institute treatment possibly rather in the dark as to why the marginal gingivitis is present and what infection is causing it.

If, on the other hand, the dental surgeon makes smears from the gums and any pockets round the teeth and sends them along for bacteriological examination, he would get a report as to what organisms, etc., are present, and then he could institute the appropriate treatment. This was particularly well exemplified during the war when the condition known as "trench gums" was so prevalent. Bacteriological examination of gum smears revealed at once that the condition was one of acute Vincent's Angina, because the spirochætes and fusiform bacilli peculiar to this condition were invariably found. Treatment with arsenic in some form soon cleans up the condition, avoiding the detrimental effects locally, and also generally by the dissemination of the toxins into the blood stream.

If, as a routine measure gum smears were taken, a reliable guide and record is established.

Later on in this paper I will endeavour to describe the best method of making such gum smears for examination.

Now let us take the cases of early pyorrhœa which are so frequently met, not only here in the Conservation Room, but also in general practice, and which if efficiently treated may mean the retention of teeth which, with wrong or inadequate treatment must finally be lost.

It is in these early cases that the bacteriological findings, coupled with those of the skilled radiologist are of such vital importance.

In a large number of these early cases there are no constitutional symptoms, and efficient local treatment, coupled with autogenous vaccination gives very good results. I would diverge here just to add that I consider that the really only efficient local treatment is radical sealing, coupled with radical excision of all pockets.

Cultures from the pockets in these early cases invariably give a growth of streptococcus longus, streptococcus brevis, micrococcus catarrhalis, pneumococcus, and staphylococcus aureus or albus.

The streptococcus longus found may be either the common streptococcus pyogenes longus or the streptococcus viridans or the streptococcus hæmolyticus.

The streptococcus brevis is a constant inhabitant of the mouth and rarely if ever can be called pathogenic. If serological tests are carried out with pure cultures of the organism isolated, it will be found in nearly all cases that the streptococcus is the infecting organism. It should be noted in this connection that agglutination tests are not always conclusive with non-mobile organisms, and that it is not very easy to break up the chains of mouth streptococci owing to the peculiar tenacity of the various cocci of the chain. Consequently in estimating the intimacy of the relationship existing between the actual lesions and the actual bacteria derived therefrom precipitating and complement-fixing antibodies may also require investigating.

Later on in this paper I will mention the correct method of making the necessary cultures from the pockets.

Now to turn to another frequent group of cases that the dental surgeon meets. It often happens that a patient comes along in whom the gum appears perfectly normal, that the teeth are quite firm, and that no macroscopical pus can be expressed from around the teeth, but radiographs show that there is marked alveolar absorption. Now alveolar absorption is almost always associated with a streptococcal bone infection and therefore such a condition needs treatment. If in such a case there is little if any consitutional disturbance it is often to the ultimate advantage of the patient to extract one tooth around which alveolar absorption is most marked and send it to the bacteriological laboratory for examination. It may be—it usually is—very heavily infected with one of the types of pathogenic streptococci and if experiments with the patient's serum give positive infection quâ infection then it is advisable to make an autogenous vaccine from the apical organism and have it administered by the bacteriologist in the hope of arresting any further bone destruction. Even if the bone destruction is only partially arrested and further extractions are necessary the administration of the vaccine will prevent marked constitutional reaction to such surgical measures, owing to the degree of immunity to the infecting organisms produced by the vaccine administration.

It is interesting to note in this connection that a marked leucopenia is a contra-indication to multiple extractions, and the dental surgeon would often be well advised to obtain a report on a total white cell count before operating upon cases showing clinical evidence of toxæmia.

Later on I will state how a tooth should be extracted and sent to the laboratory for bacteriological investigation.

Now let us turn to some chronic or subacute conditions, such as rheumatoid arthritis, or an infective urticaria, or a secondary anæmia as present, and then it will be seen what good results can be obtained by the close co-operation of the doctor, the dentist and the bacteriologist. Let us take rheumatoid arthritis as our example and trace out the co-operation mentioned.

The doctor diagnoses the condition and decides that the teeth are at any rate one of the sources of infection. Therefore, the next step in the patient's progress is to the dental surgeon. The dentist may possibly find that clinically there is little evidence of any trouble except possibly that there is a certain amount of shrinkage of the gum. The radiologist is called in and the skiagram shows that there is either marked alveolar absorption or else hidden sepsis, such as a chronic abscess or definite area of rarefaction.

It is almost a sine qua non that alveolar absorption means streptococcal infection and the only exception to this rule, as far as I can see, is the physiological absorption of the alveolus in old age. If such evidence of tooth infection is present the dental surgeon would then extract the tooth or teeth showing the most marked alveolar absorption or the chronic abscess or the rarefied area and send it to the bacteriological laboratory for culture.

In such a case as the one cited, treatment must be influenced by the bacteriological findings not only of the teeth, but possibly also from the tonsils, fæces, and occasionally from the Wassermann reaction. We will say that the apical cultures show a streptococcal infection; then it is advisable to make an autogenous vaccine, and if the tonsils and fæces show the same infecting organism it is as well to include these strains in the vaccine.

After about 4 to 6 injections of the vaccine the dental surgeon should then see the patient again and if necessary, cautiously extract any

further teeth that may be necessary, but he should be guided by the severity of the general symptoms, and though not being too reckless in his extractions he should not attempt to save teeth that the radiograms show are obviously infected. The treatment should be completed by a continuation of the vaccine for about three months.

I should like to mention here that some recent pathology on alveolar absorption by Ségun Kutchersky has tended to show that the primary cause of the absorption is the symbolic action of the fusiform bacillus and one or more of the buccal spirochætes, and these two authorities are of the opinion that the pus forming organism, such as the streptococci, pneumococci, etc., are secondary. On these lines the treatment has been to give intravenous N.A.B. to combat the pus-spirilla infection and a vaccine of the pus forming organism has been given to combat the secondary effects.

At present the pathology is not proved so that the treatment is rather experimental.

Now to turn to those cases of infective urticaria, which the dermatologist decides have the primary focus of infection in the teeth. Such cases are sent to the dental surgeon, who generally by extractions eradicates the dental sepsis. In some cases this is sufficient to clear up the condition, but in all cases the extracted tooth or teeth should be sent to the bacteriologist so that cultures from the apices can be made, and vaccines prepared. This is essential as such conditions tend to recur, unless the patient is desensitised by means of vaccine treatment.

Many more cases might be cited where the close co-operation of the dentist and bacteriologist results in benefit to the patient, but I won't bother you with any more.

In conclusion I should like to give a few practical hints on the technique of certain bacteriological investigations.

Gum Smears.

1. If pus is present round the teeth a little should be expressed by cotton wool plugs and then drawn up into a pus capillary glass tube by means of a rubber teat. The material should be forced out on to a clean glass slide and a thin smear made by spreading with a platinum loop. The smear is fixed by passage through the flame two or three times and then sent to the bacteriological laboratory.

2. If very little or no pus is present round the teeth it is advisable to carefully dry round the tooth showing the most inflamed portion of the gum and then to scale down deeply, as far as possible, and spread the material obtained evenly on a clean glass slide. It is fixed in the same manner as cited above and then sent to the bacteriological laboratory for examination.

Culture from Pyorrhœa Pockets.

It is really best for the bacteriologist to take the necessary culture himself, in which case he will express the first bead of pus from the pocket, wipe it away and then inoculate a sterile platinum loop from the pocket and inoculate the necessary medium on the spot.

If the dental surgeon is making the culture it is best to use a thin "diphtheria swab," and after wiping away the first bead of pus to thrust the swab down into the pocket as deeply as possible, then return it to its test tube; send to the bacteriological laboratory at once.

To Send Teeth to the Laboratory.

1. Sterilisation of surrounding parts.
2. Local Anæsthetic.
3. Don't brush gums, cheek or tongue.
4. Put tooth in Petri dish.

Correspondence.

To the Editor of Guy's Hospital Gazette.

European Student Relief.

Dear Sir,—I write as one of a small party of Oxford Undergraduates who last September spent an interesting and to me memorable four weeks visiting some of the Central European Universities. The experience convinced me that it would be most desirable that as many British students and Undergraduates as possible should do the same thing in the future, partly as an educational gain for themselves, and partly because there is perhaps no more important consideration for the future peace of the world than that the rising post-War generations of the various European countries should get to know and understand each other. It is also desirable that anyone journeying in this way should realise that there are people in the different countries they visit who are anxious to give them every assistance in overcoming what appear to most people, who have not been much abroad, formidable obstacles and difficulties in the way of Continental travel.

To this end I have sought the co-operation of the people who helped us last year, and have asked them to help any British student who may tour through University cities on the Continent this summer, in any way they can.

A body known as the European Student Relief Committee has been in existence since the autumn of 1920, and has branches in all the University towns of continental countries which have suffered economic distress. In each country there is a European Student Relief Secretary who is in close personal touch with different representatives in every University within that country. With the co-operation of these Secretaries the following arrangements have been made :—

Student hostels wherever possible will be placed at the disposal of undergraduate visitors from other countries during the vacation time, where quite comfortable beds will be secured at considerably cheaper rates than could possibly be obtained in any hotel. Students desiring to visit a University town in one of the countries mentioned on the enclosed list should send a postcard to the E.S.R. Secretary asking him to reserve a bed between the dates desired. This will be done, and on arrival the visitor should go to the E.S.R. Secretary, who, in addition to having found him sleeping accommodation, will be in a position to give him valuable general information. He could tell him good places for meals, what museums to see, what trips outside the town to make, what theatres to go to, how much to tip waiters, how much to pay taxis, etc., all of which information is invariably of the greatest use to a stranger.

Further, the E.S.R. representative would be in a position to give the visitor an inside knowledge of existing conditions in the country. He could supply him with literature in the form of pamphlets or leaflets, and, if the visitor wished, he could arrange for him to meet natives, who could speak with authority and knowledge of the true conditions. Meals would not be provided in the Hostel as most undergraduates would prefer to have them in some restaurant where there is always an opportunity of seeing the life of the town.

It is important to realise that the visitor under these circumstances must consider himself just as free as he would be if staying in a Hotel entirely on his own. No organised programme would be prepared for him beforehand, and no arrangements made that he does not agree to himself. But, if he desired, he could acquire reliable and accurate information, which is not always very easily obtained, as to the economic and political conditions of the country, the material conditions of the student class and of the general population, the likes, dislikes, affinities, aspirations, and fears of the country as a whole. Further, he could live for about a third of the cost.

Thus a visitor could, in a very short space of time, say four or five days, or a week, learn a surprising lot about a country he had never seen before, and would acquire an interest in it which would last him till the end of his life.

Attempts have been made to arrange organised tours for students. These are doubtless valuable, but involve an enormous amount of elaboration before hand. Further, many people shrink from joining these because they dislike being herded, and losing their individual liberty, and are also frequently put off by the fear of a missionary spirit in the party, which seems to act more effectively than anything else as a deterrent.

According to the scheme outlined here, however, undergraduates could travel alone or in couples or threes, go where they wanted, stay as long as they wished, and do exactly as they liked, but they would feel that in the E.S.R. Secretary they had a friend who would help them in any way he could, and who would give them every information they required.

The whole movement has been organised with no other object than that of encouraging English students to travel abroad, and to gain first-hand impressions of other countries. An important consideration for many is that many European exchanges are now favourable to us, so that travel is comparatively cheap.

In countries with a high exchange it has not been possible to extend the same facilities. Switzerland, Holland, France, Belgium and Italy are contributing countries to European Student Relief in the countries mentioned on the enclosed list. They have therefore naturally no European Student Relief staff. They have, however, their respective University collecting agencies for E.S.R. work, and these gentlemen would, I am sure, be very glad to give any personal advice in regard to the University life of their country or other general advice, if asked. I include their names at the foot of the list already referred to.

May I suggest that as much publicity as possible should be given to this effort to facilitate travelling arrangements for students the world over?

If I can be of any further assistance to you, I shall be glad to answer any other questions you may wish to raise.—I am, Sir, yours very truly,

C. P. BLACKER,

12, Eldon Road, W.8.

EUROPEAN STUDENT RELIEF REPRESENTATIVES.

The following persons are in a position to find accommodation for student visitors if written to

beforehand. They will also give visitors every assistance :—

Switzerland.—Hqs. Conrad Hoffmann, 16 Bd. des Philosophes, Geneva.

Austria.—Donald Grant, Rektoratskanzlei Universitat, Vienna, 1.

Czecho-Slovakia.—Miss M. Quayle, Studentsky Domov, Albertov na Slupi, Prague II.

Germany.—A. W. Bonsey, Tieckstrasse 17, Berlin N.4.

Hungary.—Ray H. Legate, 8, Museum Korut 6, Budapest.

Poland.—O. Pederson, Ul. Kopernika, 41, Warsaw.

Greece.—D. O. Hibbard, 44, Metropolitan Street, Athens.

Estonia.—G. F. Robinson, Y.M.C.A. Ruutli ulitza, 7a, Dorpat.

Latvia.—B. Mitchell, Terbatas iela 4, Riga.

The following persons will not be able to find accommodation, but they will be glad to give what assistance they can :—

CONTRIBUTING COUNTRIES.

France.—Monsieur R. Vernet, 93, Boulevard St. Michel, Paris V.

Belgium.—J. E. Asterrieth, 85, Neir, Antwerp.

Holland.—Dr. H. C. Rutgers, Hardenbroek, Driebergen.

Headquarters in London.—Miss Iredale, General Buildings, Aldwych, London, W.C.2.

Toxic Symptoms following the Alkaline Treatment of Peptic Ulcer.

SIR,—In view of the fact that I have for several years been a strenuous advocate of the medical treatment of gastric and duodenal ulcer in preference to surgery, I think it only right to draw attention to the possibility of toxic symptoms arising as a result of using very large doses of alkalies.

Sippy, who was the first to recommend this treatment with the object of completely neutralising the acid of the gastric juice, has not referred in any of his papers on the subject to the toxic symptoms which may result. In a recent paper from the Mayo Clinic, Hardt and Rivers describe the toxic symptoms which may develop in cases in which it is impossible to neutralise the acid completely. The patient is at first unduly introspective and nervous. He then complains of difficulty in taking his milk. After a time headache, nausea and vomiting occur. The patient becomes apathetic and drowsy, and in one of their cases death ensued. In every instance the urea in the blood became greatly increased, and albumin and casts appeared in the urine. In some there was evidence of kidney disease before the symptoms developed, and in the fatal case definite chronic nephritis was found.

I have met with three similar cases in private patients, though none in hospital, during the last three years. In one case the patient had only one kidney, and this was affected with pyelitis. In the other two patients a moderate degree of pyloric obstruction was present, and there was an extreme degree of hypersecretion ; in one of these death occurred, in spite of the early cessation of the alkaline treatment. The urea content of the blood was greatly increased in all three cases.

It is impossible at present to say what is the cause of the toxic manifestations. But it seems clear that no case in which the kidneys are diseased should be subjected to the full alkaline treatment, and the same is true when partial pyloric obstruction is present in spite of Sippy's advocacy of the treatment in such cases. If any suspicious symptoms develop, a blood-urea estimation should be made and the treatment discontinued until it is ascertained whether it is excessive; in that case the treatment should be modified.

For ulcers associated with renal disease, treatment by diet, olive oil and belladonna in the manner I have described, with only small doses of alkalies, may give sufficiently good results, but if pyloric obstruction is present, even in a mild degree, it is probably wise to recommend gastro-enterostomy without further delay.—Yours, etc.,

A. F. HURST.

June 17th, 1923.

REFERENCES.

L. L. Hardt and A. B. Rivers: *Arch. Int. Med.*, xxxi., p. 171, 1923.

The Biennial Dinner.

DEAR SIR,—You have already announced that the Biennial Dinner is to take place on Wednesday, October 17th, at the Connaught Rooms. Mr. Guy Bellingham Smith will preside, and the following Guy's men have accepted the invitation of the Committee to act as Vice-Chairmen. The names are arranged in order of seniority of qualification, from 1874 to 1915 :—Col. W. Culver James, H.A.C., E. R. Mansell, H. T. Sells, H. J. Holman, Col. E. M. Pilcher, C.B., C.B.E., D.S.O., C. G. Roberts, Astley V. Clarke, B. W. M. Aston Key, John Howell, H. J. Starling, R. H. J. Swan, O.B.E., Col. H. P. W. Barrow, C.M.G., D.S.O., O.B.E., R.A.M.C., F. J. Pearce, Sir John Atkins, K.C.M.G., E. M. Harrison, Prof. T. B. Johnston, A. W. F. Denning, E. L. Elliott, H. P. Warner, H. L. James, A. V. Moberley, G. B. Pritchard, R. Curle and N. E. Kendall.

The same plan will be adopted as in previous years; each Vice-Chairman will preside over a separate table, and those coming to the dinner will have an opportunity to indicate at whose table they would prefer to sit, thus assuring that, as far as possible, old friends can sit near each other.

The list given above is an ample guarantee that the Committee may look forward to receiving as valuable help from the Vice-Chairmen as on former occasions.

The charge for the dinner will be 14s. exclusive of wine. I earnestly ask the help of all Guy's men, hoping that they will write and ask their friends and colleagues to bear in mind the date of October 17th, so that we may make the Dinner an even greater success, if possible, that in any previous year.—Yours sincerely,

ARTHUR W. ORMOND,
Honorary Secretary.

9, Devonshire Place, W.1.
June, 1923.

The Extension of the Medical School.

The extension of the Medical School, which will be opened by H.R.H. The Prince of Wales on Monday, July 2nd, will provide new Anatomical, Biological and Physics Departments, together with additional accommodation for Physiology and Surgery. The building is a steel and concrete structure, situated immediately behind the existing School Buildings and communicating with them on every floor.

In a district such as the Borough, where land is so valuable that buildings are closely packed together, it is very difficult to obtain good daylight for scientific laboratories. In this respect the new building is very much more happily situated than might have been the case, for both to the north and to the south sides the adjoining buildings are relatively low. That the maximum window space has been obtained may be judged from the fact that the building possesses no fewer than 50 large double-windows and 40 large single and smaller windows, in addition to roof lights on the third floor. As far as was practicable the inside partition walls have been made of glazed brick below and glass screens above.

The flooring has been designed with a view to eliminating vibration, and consists of a concrete foundation, covered with the latest type of oak wood-blocks. In the dissecting room, the operative surgery room, and the surgical research room, terrazo flooring has been substituted for wood blocks, with the object of facilitating cleaning. Vitreous mosaic has been utilised for the corridors, laboratories and part of the basement.

The inside walls consist, for the most part, of white glazed brick up to the dado, except in certain rooms where, on account of the desire for increased reflected light or for cleanliness, the glazed brickwork has been carried up to the ceiling.

Having briefly reviewed the actual structure, we may pass on to describe the accommodation provided on the various floors.

The flat roof has been left partly free, so that animal hutches, tanks for the breeding of fresh water animals, etc., can be kept in the open. The part of the roof which adjoins the present building houses the students' lavatory and locker room (where 200 lockers are provided for second and third year students), and a small photographic or artists' studio, with a dark-room cupboard attached, and an animal room.

The third floor is devoted entirely to Human Anatomy. The dissecting room occupies the western half, and measures 80 feet long by 24 feet wide. The lighting is ideal. The north, south, and west sides are practically continuous windows, while there is also a large roof light. In a city of winter fogs it is necessary to provide artificial lighting on a generous scale. The scheme adopted is a new one. A rigid tubular fitting is suspended over the centre of each table carrying a single lamp. Curved arms lead from this support to the head and foot of the table, and end in Y-shaped extremities, each of which bears an electric plug. Metal flex lamps are provided and, when necessary, five lamps can be used at each table. The walls of the dissecting room have a slate dado, six feet high, so that ample space for drawing is provided. There is a large sink and draining board at each end of the room. The terrazo-flooring is inclined, so that there is a drop of one inch from the east to the west side. This arrangement will facilitate cleaning, as it will be possible for the floor to be hosed down.

A small demonstration theatre, roof-lit, leads off the dissecting room. It is capable of seating 50 students comfortably.

The third floor also provides two specimen rooms, and the assistants' rooms.

The west side of the second floor is occupied by the Students' Histology Laboratory and the Histology preparation room. The former gives bench room for 73 students. Each place has its own electric light plug and is provided with a lamp, encased in a metal shield so as to avoid all glare. Gas connections, water and sinks are available for each student and two shallow drawers only are provided under the bench so that there is plenty of leg room. The Histology preparation room communicates with the students' laboratory, from which it is separated by a glazed brick and glass partition. Here the section-cutter will work and his services will be at the disposal of the Anatomy, Biology and Morbid Histology Departments and the Gordon Museum. This room has places for eight senior students, who may wish to do advanced histology or practical embryology.

Two private laboratories are provided on this floor, one for the Lecturer on Anatomy and one for the Demonstrators of Anatomy. In addition, a large room is available as a departmental library and it will subsequently house reconstruction models illustrating human and mammalian embryology. It is specially intended that this room should serve as a quiet reading room for students working for the primary examination for the F.R.C.S.

The remaining rooms of the Anatomy Department are situated in the basement. In addition to an airy and well-ventilated tank-room, a reception and preparation room, a store room, and a large workroom are provided. As a result, the assistants in the Anatomy Department will, in future, carry out their work under greatly improved hygienic conditions. An electric lift, opening into the tank-room, connects the various floors. Photo-micrographic and dark rooms are also housed in the basement. The remaining space is occupied by a demonstration theatre, which is capable of seating 70 students, and will be at the disposal of the Anatomy in common with the other departments of the School.

The Biology Department occupies most of the first floor. The students' laboratory is fitted up in the same way as the Histology laboratory, except that microscope cupboards are provided under the benches and a different type of lamp, which can be utilised both for dissecting purposes and for microscopical work, has been adopted.

Private laboratories for the Lecturer and his Demonstrator give opportunity and accommodation for research work, which have not previously been available.

The Operative Surgery Room occupies the south-east corner of this floor and it has been fitted with the same type of lighting as the Dissecting Room. Adjoining it, a room has been set apart for Surgical Research work. It will be equipped as a small operating theatre for experimental work on animals.

The Physics Department will occupy the first floor and will now consist of a students' laboratory, an optical room—which will be shared by the Physiology Department for ophthalmoscopic and laryngoscopic work—and research rooms for the Lecturer and his Demonstrator. The students' laboratory measures 60 feet by 24 feet, and provides bench room for 50 students working at the same time. The floor space is occupied by six teak-topped tables, fitted with cupboard accommodation. Each table has a hinged flap which, when closed, is flush with the table top, but when open reveals a sunken well containing water supply, a sink, electric and gas connections. Power connections are available where necessary. Situated on the first floor, this laboratory is at a disadvantage as regards daylight, and the electric lighting installation has had to be on a generous scale.

The transference of the Physics Department to the extension has set free the three rooms at present occupied by that department, and these have been utilised to improve the research accommodation of the Chemistry Department, and to provide a students' laboratory for advanced work in Organic and Bio-Chemistry.

The latter will be available for the Physiology Department for students studying for the B.Sc., Honours Degree in Physiology. This additional accommodation will enable the existing research rooms to be re-arranged, so as to render them more suitable for the purpose. A small room will be allotted to serve as a Departmental Library and balance room.

From the above description it will be clear that the value of the School as a centre for medical education has been greatly enhanced. All the non-clinical subjects, with the excep-

tion of Pathology and Pharmacology, are now housed under one roof and the opportunities for collaboration are greatly increased. It will be relatively easy now for the Anatomy and Biology Departments to work together, and this association can be taken advantage of for the purpose of linking up the study of embryology and comparative anatomy.

The most striking re-arrangement is the grouping of Histology with Human Anatomy. There is, at the present time, general agreement that the study of microscopical and macroscopical anatomy should be closely associated, but local difficulties have prevented the transfer of Histology from the Physiology to the Anatomy Department at all the Schools except Manchester University and University College, London. Guy's is, therefore, well abreast of modern views with regard to this part of the medical curriculum.

In the Anatomy Department every facility is now available to encourage the members of its staff and others to carry out research work. In this connection the provision of a room for Surgical research may ultimately prove of great value to the School, and its close association with the Anatomy Department should be a source of benefit to all concerned. Facilities are now offered to senior students to study embryology for themselves and to acquire a knowledge of organogenesis from their own observations.

Taken, as a whole the extension of the School will result in the provision of additional teaching accommodation in accordance with existing ideas, in the provision of additional research accommodation in Chemistry, Physics, Biology, Anatomy, Physiology and Surgery, and in the closer linking up of these subjects with one another. The school can now justly claim that it possesses facilities for teaching and research in the pre-clinical subjects second to those of no other similar institution.

The total cost of the structure, together with the necessary furnishings and equipment will ultimately amount to nearly £40,000. To meet this cost the Medical School has been compelled to borrow, but it was induced to do so by the knowledge that the generous bequests of the late Mr. C. H. Wells and the late Mr. L. A. Dunn would in time materialise. At present the School is only receiving less than one third of the annual income which it will ultimately derive from these two sources. The fact, however, that these bequests will be utilised for payment of interest and for the reduction of debt for the ensuing 12 years is not entirely satisfactory and it is intended to launch a further appeal for endowments for the Medical School at no distant date.

Obituary.

LANGFORD GEORGE DAVIES.

Guy's men of twenty years ago will learn with regret of the death of Dr. Langford George Davies from pulmonary tuberculosis.

Davies came to Guy's from Cambridge in 1901. With his graceful well-knit figure, his hearty laugh and cheery manner, he soon became a popular member of the Hospital. He arrived with the reputation of a good hockey player, and for four or five years he played inside right for the Hospital.

In the wards he established a solid reputation as a hard-working man, and became in due course House Surgeon, and, later on, obstetric resident. After holding an appointment at the Evelina, he went into practice near Exeter, where he remained until April, 1915. He then joined the R.A.M.C., serving in the "Aquitania" for some months, and then joining the 45th C.C.S. in France, where he served during the battle of the Somme. At this time his health broke down, and he was invalided home, where he remained until March, 1921, when he was demobilised. During his spell of home service, his health did not recover sufficiently to allow him to return to general practice. He died suddenly following a severe hæmoptysis. He leaves a widow and one son, for whom much sympathy will be felt.

WILLIAM DOUGLAS TRESIDDER.

It is with the greatest grief that we report the death of William Douglas Tresidder, during his studentship at the hospital. A son of an old Guy's man, Dr. William Elliot Tresidder, of Plymouth and a grandson of Surgeon-General Tresidder, of the Indian Army, he left Bedford School in 1913 to become a student of railway engineering on the Midland Railway at Derby. In 1915 he joined the Inns of Court O.T.C., was transferred to the Royal Field Artillery, commissioned in 1916, and served for three years in France. He was twice wounded and, on demobilisation, entered Guy's in May, 1920. Well known to men in the wards, he was doing the appointment of Senior Surgeon's Dresser at the time of his death, which was caused

by an accident while taking part in a "Rag" with Polytechnic students, who, in fancy dress, were on their way to a garden party in a crowded Studebaker car. Tresidder was standing on the footboard, holding on to the windscreen, when going round a sharp corner he was thrown off backwards on to his head and was dead before he could be picked up. Thus very suddenly and tragically he has left us in his twenty-seventh year, a hard-working, conscientious man, who in his three years at the Hospital had made a large number of friends. Our deepest sympathy is extended to his parents and particularly to his brother, who entered the Hospital with him in 1920 and has worked with him ever since.

Guy's Hospital.

Medical School.

Applications are invited for the following appointments, the duties of all the posts to commence on October 1st, 1923.

Particulars as to honoraria may be obtained on enquiry either in the Superintendent's Office or in the Medical School Office, and applications should be sent to the Treasurer, at the Superintendent's Office, not later than June 22nd.

I.

Tuberculosis Officer	1
Medical Registrars and Tutors	2
Medical Assistant	1
Surgical Registrars, Tutors and Assistants ...	2
Obstetric and Gynæcological Registrars	2

II.

Chief Clinical Assistants and Registrars—	
Ophthalmological Department	2
Throat and Ear Department	1
Orthopædic Department	1
Chief Clinical Assistant in—	
Dermatological and V.D. Department ...	1
Genito-Urinary and V.D. Department ...	1
Children's Diseases Department	1
Actinotherapeutic and Electrical Department	1
Bacteriological Department (Senior Assistant Bacteriologist)	1
Chief Clinical Assistant (Female) to the Obstetric Surgeons V.D. Department ...	1
Resident Medical Officer, Bright Ward	1
Anæsthetists to the Hospital	2
Assistant Anæsthetists to the Hospital	4

III.

			per ann.
Demonstrators of	Anatomy (part time)	1 ...	£100
,,	Pharmacology ,,	1 ...	£100
,,	Pathology ,,	1 ...	£100
,,	Chemistry (whole time)	2 ...	£250
,,	,, (part time)	1 ...	£100
,,	Physics (whole time	1 ...	£250
,,	Biology ,,	1 ...	£250

The attention of applicants is drawn to the fact that appointments are made in the first place for two years.

Dental School.

Applications for the following appointments should be sent to the Treasurer, at the Superintendent's Office, not later than June 22nd, 1923.

Dental Radiologist	1
Dental Bacteriological Assistant	1
Demonstrators of Prosthetic Dentistry	2
Demonstrators of Operative Dentistry—morning attendance three times a week, with charge of *Probationary Classes* and ordinary extractions	4
Demonstrators of Operative Dentistry—afternoon attendances	2
Dental Officer to Salomons Welfare Centre ...	1
Anæsthetist to the Dental Department, Salomons Welfare Centre	1
Assistant Anæsthetists to Dental School	4
Registrar to Children's Dental Department ...	1

The duties of the above appointments to begin on October 1st, 1923.

Notices.

British Empire Cancer Campaign. The King's Donation.

Sir Arthur Stanley has received the following letter from the Rt. Hon. Sir F. M. Ponsonby:—

Privy Purse Office,
Buckingham Palace, S.W.
4th June, 1923.

My dear Stanley,

I am commanded by the King to send you the enclosed cheque for £100, as a donation from His Majesty towards the Fund you are raising on behalf of the British Empire Cancer Campaign.

Yours sincerely,
(Signed) F. M. PONSONBY.

The Honourable
Sir Arthur Stanley, G.B.E., C.B.,
19, Berkeley Street, W.1.

Sir Arthur Stanley has replied in the following terms:—

British Red Cross Society,
19, Berkeley St., London, W.1
6th June, 1923.

My dear Ponsonby,

Your letter dated the 4th inst., only reached me this morning. Will you please convey to His Majesty our most dutiful and grateful thanks for His Majesty's very generous donation to the fund which we are raising on behalf of the British Empire Cancer Campaign. It is a very great encouragement to us to know that in this Campaign we have His Majesty's support and approval.

I am,
Yours sincerely,
(Signed) ARTHUR STANLEY.

The Rt. Hon. Sir F. Ponsonby, G.C.V.O.

Subscriptions to the British Empire Cancer Campaign should be sent to the British Red Cross Society, 19, Berkeley Street, London, W.1., addressed to the Rt. Hon. Sir Arthur Stanley, G.B.E., C.B., or to Lloyd's Bank and its branches.

Cheques, etc., to be made payable to British Red Cross Society, and crossed "British Empire Cancer Campaign—Lloyd's Bank, Ltd., Not Negotiable."

JUNIOR PRIZES FOR GENERAL PROFICIENCY.

Students intending to compete for the above Prizes are reminded that the examination in Histology will take place on Tuesday, July 3rd, from 10 a.m. to 1 p.m., and the examination in Elementary Anatomy will be held on Wednesday, July 4th, from 2 to 5 p.m. Only those students who are attending a course in Histology for the first time this Term are eligible to compete in that subject, and those students who have been in attendance in the Dissecting Room for not more than two Terms are eligible to take the examination in Elementary Anatomy. Candidates who propose to take this examination are requested to forward their applications to the Medical School Office on or before Tuesday, June 26th, 1923.

Medical School,
Guy's Hospital,
16th June, 1923.

On Breakfast, the Meal Majestic.

Neither Don Juan on his pilgrimage of philandering, nor Don Quixote on his travels of chivalry could have persisted in their quests with greater yearning and hunger than I have mine; for mine is the quest of the Perfect Breakfast.

In our dictionaries we find opposite to the word "breakfast" some such advice as "a break or breaking of a fast," or, "the first meal of a day." The best lexicographer, however, is but human, and, being so, he errs: to Englishmen there can be no other meaning than bacon and eggs. England should be proud of the man whose genius discovered the combination of a deceased pig and a potential fowl There are, admittedly, sausages, kidneys, mushrooms, tomatoes even, but the breakfast's one foundation is unquestionably—bacon and eggs. The rest are mere, if necessary, subsidiaries.

Charles Lamb, that pleasant, brilliant little stammerer, in one of his essays informs us that "much depends upon when and where you read a book." "Milton," he says, "requires a Solemn Service of music to be played before you enter upon him." And though Orpheus (and his lute) is at most times and places agreeable, at breakfast his intrusion would be tolerated by no one, not excepting the most ardent, restless "syncopater." But, that breakfast, no less than book-reading, does require some kind of a ritual is undoubted.

How, then, are we—the chosen few—who have realised the solemnity of our undertaking, to reverence the majesty of breakfast? Happily the duty involved is a congenial one. First, one must have a sense of infinite leisureliness. That wild, perspiring burst down the station road, with yolk not yet dry upon the lips, makes for bad fellowship for the remainder of the day. Nor does leisureliness mean slothfulness. Indeed, an early rise is essential to the scheme. A preliminary amble to the newsagent for the morning paper brings one the advantage of reading the paper whole, and avoids the risk of being left with a legacy of the advertisement sheet.

The appproach to the breakfast table is difficult at first to accomplish really well. Uncles do it naturally and easily, those uncles especially whose jovial ponderosity instinctively reminds one of port—"porty uncles" one can describe them without fear of being misunderstood. Watch that appreciative clap of the hands, that smile widen, and listen to the deep, comfortable, anticipatory "ah!" and hope that you too may one day reach such a perfection of artistry.

And then breakfast itself. Unfortunately there is not space enough here for a treatise: porridge, coffee, tea, toast, marmalade, bacon,—all demand a fine delicacy of skill in preparing and consuming. I can only refer the student and those who wish to follow the subject more deeply to works such as "Fireside and Sunshine" of Mr. E. V. Lucas.

Nevertheless, I hope I have indicated to some slight degree the seriousness and attention which must be given to the pleasantest, finest, of all meals. And if, on some mornings, you should meet a disgruntled, despondent creature, and would try your "latest" on him, withhold; it will be the writer leaving his College A.B.C. breakfast!

TARTAN.

Papers by Guy's Men.

C. Worster-Drought, M.D., M.R.C.P. Herpes Zoster with Localized Muscular Paralysis. — *Brit. Med. Journ.*, 1923, i., p. 970.

J. Allan Berry, M.S., F.R.C.S. A case of Coexisting Uterine and Ectopic Gestations.—*Lancet*, 1923, i., p. 1157.

A. Bulleid, L.D.S., M.R.C.S. The direct uses of dental bacteriology in assisting dental Procedures.—*Journal of Clinical Research*, April, 1923.

The Fison Memorial Fund.

The following additional contributions have been received to the Fison Memorial Fund:—

	£	s.	d.
Professor J. W. H. Eyre	1	1	0
Percy F. Frankland, Esq. ...	1	1	0
Frank Cook, Esq.	1	1	0
M. F. Hopson, Esq.	10	10	0
E. A. Godfrey, Esq.	1	0	0
Dr. Herbert French	10	10	0
J. B. Parfitt, Esq.	5	0	0
L. Bromley, Esq.	10	10	0
J. Lewin Payne, Esq.	10	10	0
J. J. Conybeare, Esq.	2	2	0
Dr. E. P. Poulton	10	0	0
L. Muir Smith, Esq.	1	1	0
C. W. Kimmins, Esq.	1	1	0
Miss E. Penrose	1	1	0
M. E. Sadler, Esq.	1	0	0
Dr. J. Fawcett	10	10	0
E. C. Garbutt, Esq.	1	1	0
Sir Henry A. Miers	2	0	0
J. A. N. Marriott, Esq.	1	0	0
Dr. P. P. Laidlaw	10	0	0
The Rt. Hon. Ld. Richard Cavendish	5	0	0
Sandy Lodge Golf Club, Ltd. ...	1	1	0
C. F. Markes, Esq.	1	1	0
G. W. Cromwell, Esq.	1	1	0
The Guildford Lectures	3	3	0

The Simmin's Appeal Fund.

The following additional subscriptions have been received to the Simmins Appeal Fund:—

	£	s.	d.
M. F. Hopson, Esq., L.D.S. ...	2	2	0
F. Manser, Esq., M.R.C.S. ...	2	2	0
J. C. Young, Esq.	0	10	0
Dr. Poulton	3	0	0
Anonymous	10	0	0
E. G. Goldie, Esq.	3	3	0

The Inter-Hospital Sports.

In that morgue of a stadium, Stamford Bridge, more full of advertisements than spectators, the fifty-second inter-hospital sports were held on Wednesday, June 20th. Of the Guy's supporters a large number were members of the Staff, among whom we noticed Dr. Fawcett, Mr. Steward and the Dean, while of the others one saw only those who invariably support all hospital activities and none others. This is a free country, in which a man may spend his leisure hours where he will, but, seeing that we were fighting out an issue with our old enemies, Bart.'s, and that at least five of the competitors were international athletes, a larger attendance might have been expected. But who are we to scold? Bart.'s beat us by 106 points to 80, with the rest nowhere, and our very heartiest congratulations are extended to their team of very fine sportsmen. A detailed list of the results is appended, but some of the events were of sufficient interest to recount here. Steyn, as one expected, ran with his accustomed ease and grace, won the hundred, two-twenty, and quarter, and gave us a good lead in the relay. He was well backed up by Lacey, who was a good second in the hundred, but who lost the second place in the furlong by inches, after unaccountably slowing up in the last few yards. He appeared to have considered that the race was over. The same happened in the mile. Stallard, who on his record was easily the best man in the race, stayed back to help on his second string until the last three hundred yards, when he strode away in his easy style from Lightwood and Housden. Thinking he had won, he was not hurrying in the last few yards, when Lightwood, finding a tremendous burst of speed, got up and beat him on the tape. This was the best race of the afternoon. In the hurdles we got second place, owing to Raynor, of King's, falling at the last hurdle when he had the race well won. We deserved the points, as both Leslie and Selby have trained hard since chosen to represent the Hospital, an example which was followed by most of the team and should have been followed by all. In the jumps particularly we made a very poor show, there being an entire absence of that "Kruschen feeling" in our representatives. Not so in the hammer, however, where G. G. T. Tregarthen put up an awe-inspiring show. Taking up a good firm stance, he started to swing the hammer slowly round his head, gradually getting faster and faster until the impetus of the heavy sphere began to take him with it. Gaining speed as he went, he rocked and gyrated and puffed and panted, while the spectators ran for their lives, laying odds on the direction in which the hammer would be released, until at last with a despairing effort he flung the horrid thing several yards away from him and sat down exhausted amid the cheers of the spectators.

Perhaps our greatest triumph was in the tug-of-war. On the previous Monday we had beaten Middlesex after two hard pulls, and at the sports themselves had to pull London before reaching the final; and at one time London had only two feet to go to beat us. This was one of the many occasions on which the training of our invaluable coach, G. C. T. Tregarthen, a brother of our hammer-thrower, proved so successful. Keeping his team as cool as could be expected under such frantic, perspiring, aching, sinew-cracking conditions, and watching every movement of the opposing team, he was able to take the enemy unawares, and wave back his victorious

team from the mouth of defeat. The final tug against Bart.'s was harder still. We won the first pull and Bart.'s the second, and they might still be pulling the third had not some of the Bart.'s flexors become so paralysed that the men could no longer grasp the rope and let go through sheer inability to hang on.

At the conclusion of the meeting the prizes were distributed by Miss Morley-Fletcher.

RESULTS.

100 yards.—1, C. L. Steyn (Guy's); 2, C. K. Lacey (Guy's). 10 2-5th secs. Won by 2 yards.

220 yards.—1, C. L. Steyn (Guy's); 2, W. E. Scott-Brown (Bart.'s). 23 secs. Won by 5 yards.

440 yards.—1, C. L. Steyn (Guy's); 2, J. C. Ainsworth-Davis (Bart.'s). 52 3-5th secs. Won by 2 yards.

880 yards.—1, H. B. Stallard (Bart.'s); 2, F. W. Ta'Bois (London). 1 min. 59 4-5th secs. Won by 10 yards.

1 mile.—1, R. C. Lightwood (King's); 2, H. B. Stallard (Bart.'s). 4 min. 44 secs. Won by inches.

3 miles.—1, L. G. Housden (Guy's); 2, M. E. M. Jago (Guy's). 15 mins. 43 3-5th secs. Won by 200 yards.

Hurdles.—1, J. P. Hosford (Bart.'s); 2, W. Leslie (Guy's). 17 2-5th secs. Won by 2 yards.

High-jump.—1, J. Hinton (Bart.'s); 2, H. G. Stanton (Bart.'s). 5ft. 3ins.

Long-jump.—1, A. Clarke (Bart.'s); 2, F. W. Ta'Bois (London). 19ft. 10½ins.

Hammers.—1, R. D. Reid (Bart.'s); 2, G. H. Day (Bart.'s). 84ft. 6ins.

Weight.—1, J. W. D. Buttress (Bart.'s); 2, W. Hutchinson (Guy's). 35ft. 6ins.

Tug-of-war.—Guy's beat Bart.'s by 2 pulls to 1.

Relay.—1, Bart.'s; 2, Guy's. 3 mins. 44 2-5th secs. Won by 15 yards.

RECORD FOR SPORTS.

1, Bart.'s, 106pts.; 2, Guy's, 80pts.; 3, London, 12pts.; 4, King's, 10pts.; 5, Middlesex and Thomas's, nil.

Mr. W. Girling-Ball, F.R.C.S., took the chair at the annual dinner at the Clarendon Restaurant, Hammersmith, being supported by one official, four men from Bart.'s and seven men from Guy's. Several speeches were made, the gist of them being that everyone at the dinner was an exceptionally good fellow but that nobody entertained a very high opinion of anybody else.

Water Polo Chats.

BACK.

The Back's chief aim is to keep his man closely marked: if he prevents his particular opponent from either shooting at goal, or making an advantageous pass, he is doing his job well: if, on occasion, he breaks away with the ball, and sets forwards in motion, he is doing his job very well. When his goalkeeper or other back is in possession, he swims hard upfield, and the ball is placed in front of him; his forwards clear out of his way and he either shoots, or, having drawn one of the opposing backs, passes to his then unmarked forward. On occasion he will find his particular opponent peculiarly unenterprising, and inclined to linger on the two-yard line waiting for a pass; then the Back is fated to wait very close to his man to prevent him shooting. Should his forward display a tendency to lie, back to goal, on his belly, he is probably a devotee of the "Back-Flip": a judicious tap on the elbow at the right moment will always make a sorry spectacle of any "Back-Flip." When an opposing Back breaks away, the Home Back has two courses of action open to him. (1) He may follow his forward closely as he moves, so that the Back has no one unmarked to whom he may pass. (2) He may cut across and meet the Back: this, of course, is not always a wise move, as it leaves a forward unmarked, but, on occasion, when the three forwards have moved to clear the way, they become congested, and can easily be managed by the other Back, and the Half-Back. The Back, by constant practice, must learn to sense the position of his own men, so that he may pass to them instinctively, without waiting to see where they are.

J.S.

Marriages.

PENNY—CUBBON.—On the 2nd June, 1923, at St. Mary Magdalene's, Wandsworth Common, by the Rev. Canon Theodore Wood (Rural Dean), Laurence John Penny, elder son of the late Mr. and Mrs. William John Penny of Bexley and Worthing, to Marguerite Mary (Madge), only daughter of Captain R. Cubbon, M.B.E. (I.A. Retired List) and Mrs. Cubbon.

FLETCHER-WOOD—GAIT.—On June 4th, at Lyne Parish Church, by the Rev. W. M. Wood, Harry, only son of Mr. and Mrs. H. Fletcher-Wood, of Windsor, to Winifred, elder daughter of G. F. Gait, "*Redlands*," *Virginia Water*.

Death.

KILLPACK.—At Tanbridge, Haywards Heath, on June 6th, Charles Jeffrey, youngest son of Dr. and Mrs. Killpack (née Gimson), aged 2¼ years.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 913.] **July 7, 1923.** **[Ninepence.**

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Passim.

ON Monday last our Royal President opened the new block of the Medical School, a full account of which proceeding appears elsewhere in this number. It was a plutocratic move to choose a Monday for this glad ceremony and one which deprived a large number of Borough Loyalists from welcoming their Prince. This we discovered while discoursing on this and that with one of them in the evening. He complained that he had been unable to cheer as he had spent the afternoon in school, but added, with much satisfaction, that he had not learned anything.

Park parties of whatever description always come as a welcome relief from the sameness of hospital life, which, though pleasant and soothing, is of necessity lacking in variety. This is especially the case from the patients' point of view, and we noticed that they enjoyed the stream of visitors through their wards as much as anybody. For them, whose daily task is to eat and sleep and get well, it was a strenuous day, especially for the younger ones, and we understand that the saving in sleeping-draughts for that one night almost paid for the party.

If anything were needed to spur us on to work at our pre-clinical subjects with greater zest than ever, the magnificently equipped new laboratories surely supply that need. The only disadvantage that we have heard suggested is the long way up that it is to the new dissecting room. We have heard of at least one student who, although he has with great determination visited his part every fine day while on the ground floor, has great misgivings that he may become estranged from it now that it is less accessible.

THE Annual Inter-Hospital Swimming Gala took place last week at the Bath Club, where our team stirred up their usual tidal wave, that sweeps the entire collection of swimming trophies back to the Borough. The heartiest congratulations to all, but especially to the Nurses' team, who are still quite invincible, although they no longer have Nurse Garland to help them.

This was the last big Inter-Hospital Sports meeting of the season, but on July 28th, at Honor Oak Park the Second Annual Sports Meeting between the United Banks, Lloyds, the Stock Exchange, and the United Hospitals will be held. This competition for the "Financial Times" Challenge Shield was narrowly won last year by the Banks' team, but this year there is every reason to hope that the Hospitals will win it. The racing at this meeting is of a very high standard and is worthy of good support, but apart from that every penny of the profits is divided among the hospitals belonging to the United-Hospitals Athletic Club. Last year our share was thirty pounds, the net profits from the meeting being £152. On that occasion the money for tickets, sold at Guy's, amounted to more than twice that for those sold at all the other Hospitals put together, and we sincerely hope that the same support will be given to this year's meeting. Many of the hospital's athletes will be competing. Tickets may be obtained from A. S. Gough and M. E. M. Jago.

We were much struck with "Tartan's" article on "Breakfast, the Meal Gigantic," in our last number. The idea seemed good, if only one could rise sufficiently early in the morning to give the necessary time to it. Beyond glancing at the latest adventure of "Pip and Squeak" we rarely read the newspaper at breakfast, finding the meal sufficiently horrible without reading of other peoples' miseries. Four days ago, however, we decided to carry out "Tartan's" suggestions, and, having bought our paper, gave our preliminary "Ah!" and opened it out. And the first headline to catch our eye was, "Guy's Students arrested for collecting for charity"!!! It appears that the Derby-day collections at Epsom were quite out of order, and that summonses have been taken out for the arrest of both of the Officials from St. Dunstan's, who were in charge, and of all of the collectors. How many of us will be sent for a term of oakum-picking will depend, we suppose, on the pleading-skill of Counsel for the defence, but it will certainly be too bad if our number is to be depleted just after opening such a big new anatomy department.

We publish two photographs of last Monday's ceremony with this number, and hope to present others in the next one.

The Opening of the New Anatomy, Biology and Physics Department of the Medical School by H.R.H. The Prince of Wales.

MONDAY, JULY 2ND, 1923.

Despite the fact that full preparations had been made to hold the opening ceremony of the New Anatomy, Biology and Physics Departments of the Medical School in the Physiological Theatre should the summer weather continue, not one drop of rain fell in Southwark during the day. Long before the scheduled time for the arrival of His Royal Highness nearly every one of the reserved seats was filled and the crowd in the Press Enclosure on the roof of the baby-ward became denser every moment. By the time the platform party appeared in the Colonnade, every point of vantage in the Park was occupied. One quite senior student even attempted to climb a tree, and would have succeeded in obtaining a position second to none had his climbing abilities equalled his atavistic tendencies.

While the guests were assembling, the band of H.M. Coldstream Guards gave selections of music, and almost punctually at three o'clock His Royal Highness the Prince of Wales arrived and was received by the Treasurer of the Hospital, the Rt. Hon. Viscount Goschen, C.B.E., and Mr. H. T. Waring, M.S., F.R.C.S., Vice-Chancellor of the University

of London. After several presentations had been made in the Court Room, His Royal Highness proceeded to the scene of the ceremony, before the doors of the Medical School, accompanied by the Treasurer of the Hospital, the Vice-Chancellor of the University of London, the Principal Officer of the University of London, the Senior Physician, the Senior Surgeon, the Senior Dental Surgeon, the Superintendent of the Hospital, and the Dean of the Medical School. On entering the Park, the band played half of the National Anthem, and amid the sounds of a general greeting, His Royal Highness proceeded to the platform. After a formal welcome by the Treasurer of the Hospital, the Dean of the Medical School read the following address :—

"Your Royal Highness,

Your presence on this occasion indicates the importance of to-day's ceremony to the Medical School of Guy's Hospital. For the honour which you have done us in coming here to-day, and for the interest in our welfare which this visit betokens, we are indeed deeply grateful.

In 1897, His Late Majesty, King Edward VII., then Prince of Wales, opened the Physiology Department, which represented the first step in a scheme for rebuilding the whole of the School. Since then, the Wills Library, the Gordon Museum and new Departments of Chemistry, Physics, Pathology and Pharmacology have been added, and the extension which Your Royal Highness is about to declare open, marks the completion of the scheme within a period of twenty-seven years at a total cost of approximately £100,000.

The Extension gives us a completely new Anatomy Department, with ample accommodation both for teaching and research, not only in Human Anatomy, but also in Embryology and Histology. The various laboratories are arranged in accordance with modern ideas, and they are well, though not lavishly, equipped. New Departments are also provided for the subjects of Biology and Physics, and the transference of the latter department from the main building to the Extension sets free accommodation which enables the School to make further provision for Organic and Bio-Chemistry, rendered necessary by the increasing importance of these subjects.

We feel, Sir, that we are doing our best to keep abreast of modern views on Medical Education, but the task is by no means an easy one. In order to obtain the funds required for the rebuilding of the School, it has been necessary for us to save money out of income, to beg for money and to borrow money, and, in having recourse to the last-named expedient, we have been encouraged by the knowledge that generous bequests by the late Mr. L. A. Dunn, Surgeon to the Hospital from 1894 to 1918, and the late Mr. C. H. Wells, Clerk to the Governors from 1895 to 1915, will in time revert to the School.

The buildings behind Your Royal Highness were erected partly out of borrowed money. For the past twenty-seven years interest and capital charges have taken heavy toll of the School income and they will continue to do so for at least ten years to come. But despite the efforts which the School has made and is making on its own behalf, we would have attained a relatively small measure of success, had it not been for the generous response which resulted from former appeals for endowment, and it is our earnest hope that other benefactors will come forward in the future to relieve us of this incubus of debt, and to enable the School to carry on its work in a manner worthy of the great traditions of Astley Cooper, Bright, Addison, Gull and Wilks.

The Medical Schools of this country have always been intimately associated with Medical Research, and we venture to think that in this respect our own School has not been found lacking, and that it is worthy of its benefactors. Help given to Medical Education is the surest means of promoting the well-being and health of the nation, objects in which Your Royal House has always evinced the greatest interest.

Since the War, Medical Science has not been standing still, for progress has been made both in Research and in Education. Medical knowledge has thrust back its boundaries in many directions and with each fresh advance the prospects of further successes become brighter. The changes which are being brought about in Medical Education are indicative of a fresh spirit and a wider view. There are signs that we are standing on the threshold of a new era in Medicine, and that this School should play its part in the future, as it has done in the past, is the fervent wish of every Guy's man. To this end, we have rebuilt and enlarged our laboratories, and I have the honour now to invite Your Royal Highness to declare open the Extension of the School."

To this Address His Royal Highness replied :—

"Lord Goschen, Mr. Vice-Chancellor, Ladies and Gentlemen,

The Dean of the Medical School, in the interesting address he has just read us, remarked very rightly that Medical Science has not been standing still during the past few years. I would go further and say that at no period in the history of Medicine has so short a time produced such wonderful possibilities. Almost every day we seem to hear of some new achievement, which, if its promise is fulfilled, will be of incalculable benefit to the human race in its never-ending struggle against disease and infirmity.

In this struggle our great English Hospitals have always played a leading part. It is a struggle against heavy odds, not only because the enemy is a very stubborn one, but also because for this form of warfare, more than for any other, the so-called "sinews of war" are an absolute essential. Science and industry are not enough; to fight germs and bacteria you must have money.

Here at Guy's you have in the past been fortunate in your friends; these new departments are, to a great extent, a monument to their generosity and to their desire to benefit their fellow men. As President of this Hospital I am only too glad to have this chance of thanking them whole-heartedly. But a great and progressive Hospital like this, grateful though it be for past favours, must always have an anxious eye on the future; if its doors always stand open for those who need help, there is another door which must always stand just as wide for those who want to give help—the door of its Treasury.

Gentlemen, by these new departments of your Medical School, which I have the greatest pleasure in declaring open, you have proved that you can put the funds at your disposal to the best possible use. I sincerely hope that at no distant date you may have an opportunity of proving it once more, with equally good results to the good cause for which you work."

Mr. W. J. Walford, F.R.I.B.A., Architect of the Extension, then presented a gold key, with which His Royal Highness unlocked the door of the Medical School and so opened the Extension.

Dr. J. Fawcett, M.D., F.R.C.P., Senior Physician to the Hospital, then proposed a vote of thanks in the following words :—

"Your Royal Highness,

To me is allotted the privilege of expressing briefly, though none the less cordially, the thanks of the Staff of the Medical and Dental Schools to you for the honour you have done us by your visit to Guy's to-day and for the good wishes you have extended towards us.

We recognise to the full the many and weighty claims which are made on your generosity and your time, and in consequence the great debt of gratitude which we owe you, a debt to you, Sir, and your Royal House which we are proud to remember began in the lifetime of your beloved grandfather, King Edward, accumulated during the period in which His Gracious Majesty the King, when Prince of Wales, acted as our President, and is now added to increasingly year by year by yourself.

The children of Thomas Guy, scattered all over the world, are very proud of having you as their President and will, when they hear of your visit, thank you as heartily as those of them who are fortunate enough to be here to-day.

Your continuous interest in, and intimate knowledge of our great Voluntary Hospitals and Medical Schools is indeed an ever present stimulus to us, and I cannot imagine a position in which that stimulus could be better exhibited than at the entrance of a great Medical School, within whose portals many invaluable investigations for the good of the community have been initiated and completed, where good practical doctors are trained and where they may learn, by the way, in contact with their patients and their fellows, those little touches of human kindness, of sympathy and of tolerance by means of which they may perchance be able to help some who have had the spring taken out of their lives or it may be to alleviate the discontent of winter in others.

It is these objects to which I have referred which Your Royal Highness, by your presence here to-day desires to foster, and which we, for our part, as our ancestors did in the past, will do our best to further and to bring to maturity."

This vote of thanks was seconded by Sir Alfred Fripp, K.C.V.O., M.S., F.R.C.S., Senior Surgeon to the Hospital, whose call for three cheers brought forth a rousing response.

His Royal Highness then inspected the new buildings, after which he left, stopping on his way through the Colonnade to speak to several of the patients, nurses, and students.

Change of Address.

A. D. Marston, L.D.S., M.R.C.S., to 3, Portland Place, W.1. Tel. No.: Langham 2374.

T. Joffe, M.B., F.R.C.S., to 36, Chudleigh's Buildings, Pritchard Street, Johannesburg, South Africa.

A. V. Mitchell, to Skiddaw, Talbot Hill, Bournemouth.

Ovarian Cystadenoma at age of 12 years Complicating Acute Rheumatism and Acute Appendicitis.

Dorothy H....., aged 12 years, came under my care on 12th January, 1921, suffering from acute rheumatism. Her temperature was 100° F., pulse rate 128, and respirations 24. There was a history of an attack of acute rheumatism some months previously, which had been accompanied with pain over the appendicular region. There had been pains in the legs for some time, but during the week prior to admission she had suffered from a sore throat and these pains had become much worse.

On examination the fauces were red and inflamed, and the tonsils were cryptic and buried. The main pain was localised to the iliac crests at the attachments of the abdominal muscles, and was most marked in the mid-axillary line on the right side. Tenderness was found to be carried backwards and forwards beyond McBurney's point. The knees contained a little fluid and there was pain in the calf and quadriceps muscles, made worse on movement. The heart and lungs were normal. The abdomen was a little distended, and there was definite pain and rigidity over McBurney's point. Thinking that this might be due to a true "rheumatic" appendix, or to a rheumatic myositis, or to a combination of both factors, large doses of salicylates were given at short intervals and the temperature fell to normal during the following day. In spite of this the tenderness and rigidity over McBurney's point had increased, and on a more careful examination a tumour could be felt in the pelvis.

An operation was performed at 10 p.m. and a little free fluid was found in the abdominal cavity. The appendix was swollen and congested, and on removal found to contain pus with some stercoliths. The right tube was delivered and found to be congested and inflamed, and the ovary on that side had been converted into a cystic tumour measuring about four inches in length by about two inches in breadth. The other tube and ovary were normal. The tumour was removed and the abdomen closed. Microscopical examination confirmed the naked eye diagnosis of an ovarian cystadenoma.

This case is of interest on account of the comparative rarity of ovarian tumours at this age, particularly of cystadenomata.

It is said that solid tumours of the ovary, such as embryomata and sarcomata outnumber cystic tumours in the proportion of three to one in childhood. Other interesting points in the diagnosis were its association with acute appendicitis, with a rheumatic myositis, and with a preceding acute tonsilitis.

J. ALLAN BERRY.

A Note on the Treatment of "Morning Sickness" in Pregnancy.

Further reference to this perennial topic is only justified by the continued frequency of the condition, by the persistence of the vague "Toxæmia" theory so dear to many obstetricians, and by the apparently successful application of a very simple line of treatment.

As Dr. Hurst and many others have emphasised, the psychological factor undoubtedly plays a considerable part: many women, largely influenced by tradition, consider it the correct thing to exhibit morning sickness during pregnancy; whilst those of hysterical temperament may suffer extreme distress from continuation and accentuation of the vomiting and its effects. On the other hand, it is well known that any reasonable form of psycho-therapy will cure the majority of these cases; a mere change of surroundings, such as transference to hospital or nursing home, is frequently followed by complete relief. In a slightly different class of case there is a desire, conscious or unconscious, on the part of the patient for the termination of her pregnancy. The toxæmia theory has at least been of great service to this type of individual.

Nevertheless, the psychological element cannot obviously account for the whole condition. From time to time a woman will complain of morning sickness without having realised that she is pregnant. Moreover, certain abnormal chemical manifestations have been uniformly observed even in the mildest forms. Harding * and his co-workers have demonstrated ketonuria in all cases, of however slight degree. This and other considerations have led them to believe that a ketosis exists which they attribute to depletion of glycogen from the maternal liver. Possibly the vomiting itself provides an adventitious form of acid excretion, as, quite apart from this ketosis, there appears to be a demand for the increased elimination of "acid" even in normal pregnancy. There is little doubt that the severest cases of "pernicious vomiting" represent nothing more or less than an extreme condition of starvation and dehydration.

Administration of carbohydrate in one form or another is therefore the essential object of rational treatment; but, quite naturally, it is not always easy to persuade a much distressed patient that the more she eats the less she will be sick. Harding has suggested, and successfully applied, dietaries to meet the milder types, and other means of carbohydrate administration to deal with the more serious cases. It has been found practicable to advise the avoidance of meat. There is not the slightest reason to assume that a meat diet should be in the least harmful; but the patient is likely to obey this apparently reasonable instruction, and in so doing will automatically eat an increased quantity of carbohydrate food.

In dealing with large numbers of cases and more especially with women of the "working classes," there are certain objections to the above general line of treatment. In the first place it is practically impossible to control the psychological situation in each individual case, and secondly it is to be remembered that domestic demands too often interfere with the observance of the first important detail—a light carbo-hydrate meal taken a few hours before rising in the morning. These considerations have led one to apply an additional form of treatment.

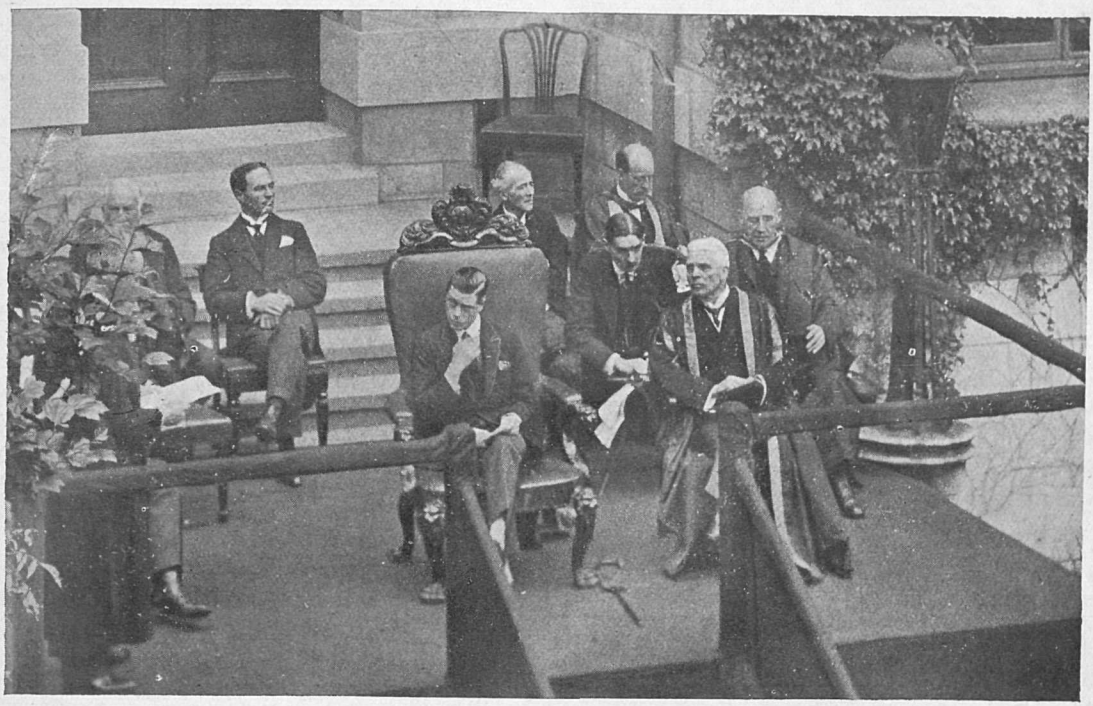
It was suggested to me by Dr. J. B. S. Haldane that the high $\frac{\text{ammonia}}{\text{acid}}$ ratio observed in the urine of cases of "pernicious vomiting" might imply a depletion of phosphate available for "buffering" purposes. A considerable number of women suffering from varying degrees of pregnancy vomiting have therefore been treated by the administration of dibasic sodium phosphate in the form of Sodii Phosphas Effervescens. This latter compound provides a palatable medium, a point of obvious importance, and has the additional merit of acting as a mild purgative. Two drachms t.d.s. are prescribed in the average case, with particular stress on an early morning dose.

This treatment has hitherto been so constantly successful as to deserve its record. Although the above briefly outlined arguments had suggested that it might be of some value, clinical results have definitely exceeded expectations. Previously a large number of cases had been treated by the application of various other forms of alkali therapy, with or without bromides, etc., but these in general were not appreciably influenced.

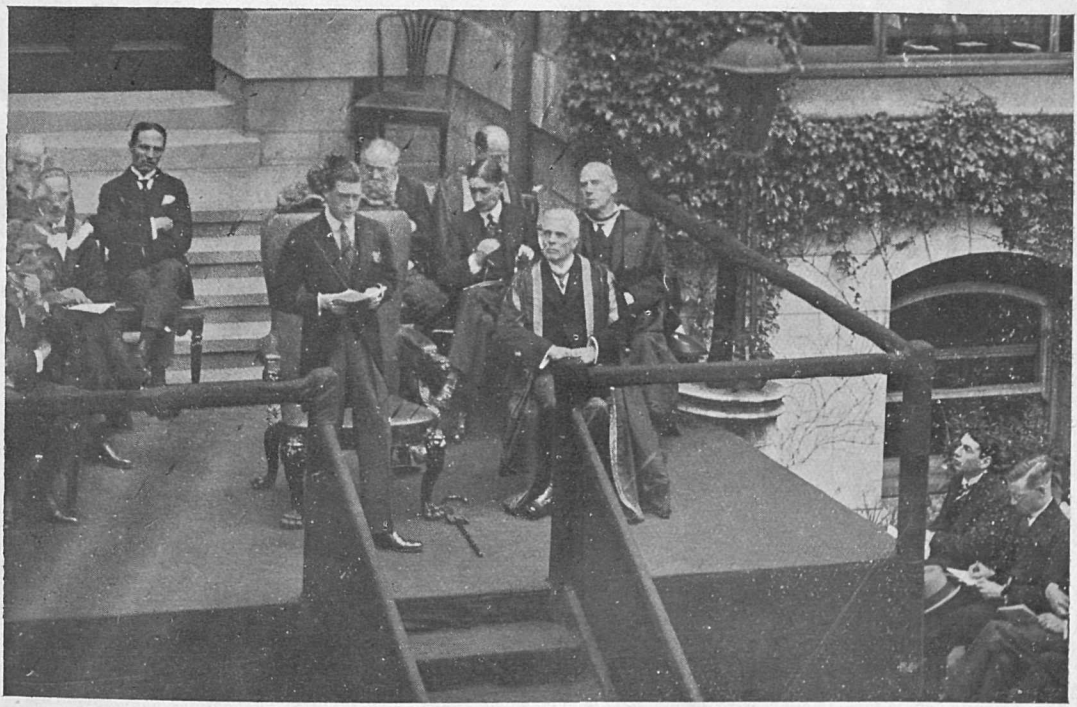
It cannot be too strongly emphasised that in pre-eclamptic conditions we have to deal with an entirely different state of affairs, although that dangerously hypnotic term "Toxæmia" suggests an affinity. There is some reason to believe that the phosphate ion itself may assume a toxic role where renal excretion is at fault, and therefore its administration is a potential source of danger in these conditions which are apparently dominated by the renal element. There is, however, no real evidence to suggest any kidney defect whatsoever in the class of case under immediate consideration.

FRANK COOK.

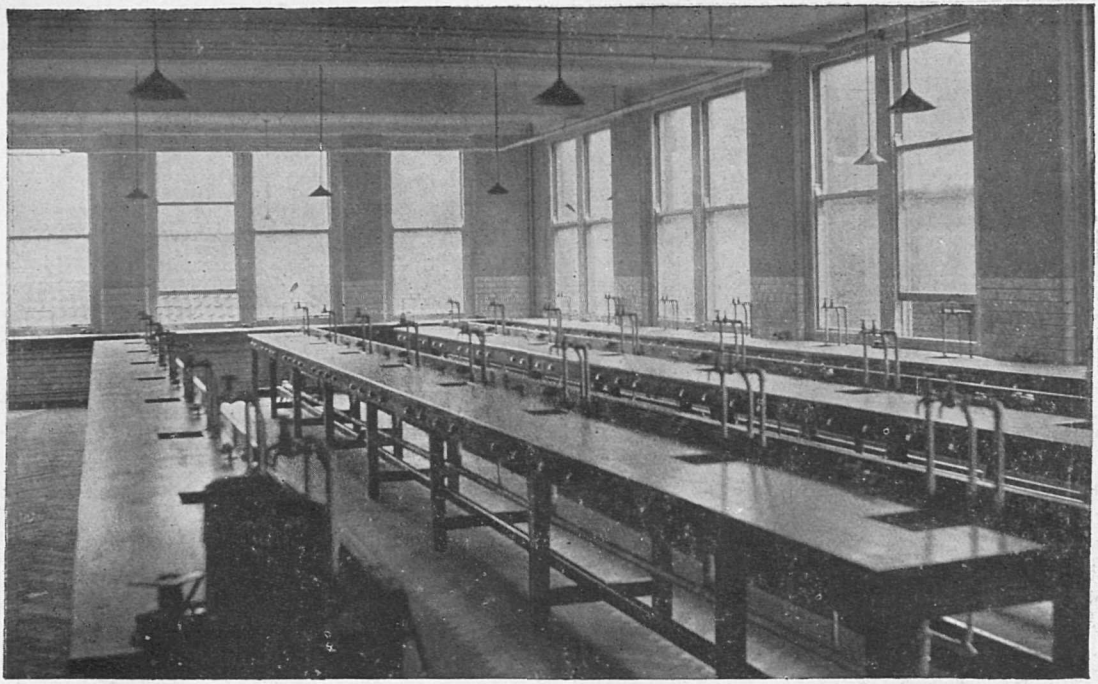
* V. J. Harding, *Lancet*, 1921, ii., p. 327.



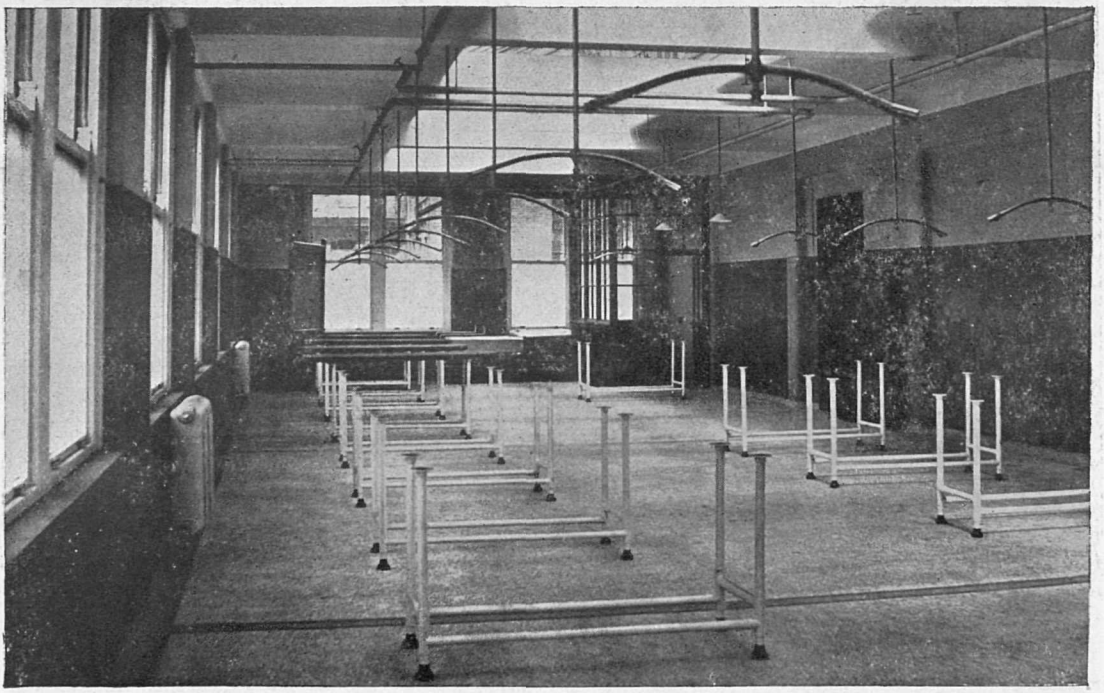
THE DEAN READS HIS ADDRESS



HIS ROYAL HIGHNESS DELIVERING HIS SPEECH.



A NEW BIOLOGY LABORATORY.



THE NEW DISSECTING ROOM.

Intestinal Obstruction.

Some Notes of a Clinical Lecture by L. BROMLEY, M.Ch.

The following are notes of cases which serve as examples of the various conditions dealt with in the lecture.

A series of seven cases, recently under my care, comprise the following conditions—

Intestinal Obstruction associated with—

1. External Hernia.
2. Intussusception.
3. Volvulus.
4. Adhesions.

1.—EXTERNAL HERNIA.

(a) Strangulated Inguinal Hernia, right side. The sac contained a long loop of small intestine in which there was venous obstruction of the mesentery. After division of the neck of the sac the congestion was relieved, and the bowel assumed a normal appearance.

(b) Strangulated Femoral Hernia, left side. The sac contained a loop of small intestine, which was congested, but not gangrenous. After division of the neck of the sac the bowel was replaced in the abdomen.

This patient died shortly after operation, and the post-mortem examination showed great dilatation of the small intestine, proximal to the portion of bowel which had been engaged in the hernial sac.

Comparison between these two cases shows points of interest with regard to the general prognosis in such cases, and also leads to a consideration as to the most effective operative procedure.

The first case was one of obstruction occurring in a relatively young and healthy man, and the duration of the obstruction was short.

In the second case the patient was a woman of over 70 years, and the symptoms of obstruction had been present for four or five days.

In both cases the local condition of the obstructed loop was satisfactory, in that it appeared to recover when the pressure at the neck of the sac was relieved; and in the case that died post-mortem examination showed no evidence of permanent damage to the bowel at the site of the obstruction.

The second case died as the result of long-standing obstruction which persisted, though the cause was removed at the operation, on account of the paralytic distension proximal to the hernia. In this case, therefore, it would seem that an operation planned for drainage of the proximal bowel might conceivably have relieved the condition, and in such a case it would be well to consider the advisability of performing a laparotomy, with a view to temporary ileostomy, and at the same time releasing the hernia from the neck of the sac.

2.—INTUSSUSCEPTION.

(a) Acute Intussusception. In this case there was a 17 hours' history. At the operation it was found that the intussusception had started about one inch above the ileo-cæcal valve, and had travelled half way along the transverse colon. The intussusception reduced easily, and the abdomen was closed after appendicectomy. In this case, as in other cases of intussusception, the lymphatic glands of the ileo-cæcal group were found very enlarged.

(b) Acute Intussusception. In this case there was a history of four days' duration, and the diagnosis of the condition presented some difficulty on account of a large accumulation of free fluid in the peritoneal cavity. The diagnosis of intussusception depends, as a rule, on two essential features: the passage of blood and mucus per rectum, and the presence of a tumour.

It would be justifiable to state that the absence of a tumour when the patient is examined under the full relaxation of anæsthesia should exclude a diagnosis of intussusception.

In this case, however, no tumour was palpable, but there was evidence of free fluid in the abdomen, and the intra-abdominal tension was such that it masked the tumour. When the abdomen was opened a large quantity of serous fluid escaped, and there was seen to be considerable dilatation of the small intestine. An ileo-cæcal intussusception was found extending to the hepatic flexure. Reduction was effected following which it was observed that there were two small perforations of the ileum just proximal to the ileo-cæcal valve. The perforations were sutured, and the abdomen closed. The patient died on the following day.

A comparison of these two cases shows the better prognosis in the first case—aged eight months—in which the duration of symptoms was limited to 17 hours; whereas, in the second

case—aged three months—the obstruction had persisted for four days. Probably the second case was too far advanced, as evidenced by the free fluid in the peritoneal cavity, and the damage to the lower ileum, to hope for recovery; but the fact that the child died without relief to the great distension of the proximal intestine, indicates the possibility that temporary ileostomy might have been more beneficial.

(c) Chronic Intussusception. This patient, a woman of 41 years, had been operated on some six months before for attacks of abdominal pain, associated with occasional vomiting. A routine laparotomy had been performed, in which the viscera usually examined were found to be normal, and the abdomen closed after appendicectomy. During the subsequent six months the patient continued to lose flesh, and vague abdominal pains continued. A fortnight before admission to the hospital for the second time, she had an attack of vomiting, in which large quantities of bile-stained fluid were ejected, associated with signs of acute dilatation of the stomach. Vomiting, on and off, continued for a fortnight.

X-ray examination showed gastric dilatation —no pyloric obstruction, and considerable distension of the first and second parts of the duodenum. The X-ray evidence suggested duodenal ileus due to obstruction about the transverse portion of the duodenum.

Laparotomy was performed; there was considerable distension of the stomach, duodenum, and proximal jejunum. This was traced to an intussusception, which dropped in the pelvis. On reduction, the apex was found to be about eight inches from the duodeno-jejunal flexure. The apex and three inches of jejunum on either side was excised, and an end-to-end anastomosis performed. The specimen removed showed a sessile tumour on the contra-mesenteric surface of the jejunum; microscopical examination subsequently proved this to be a colloid carcinoma. After operation, the patient made an uninterrupted recovery, and when seen six weeks later after her return from a convalescent home she was eating solid food without discomfort, and had put on more than one stone in weight.

Tumours of the bowel as a cause of chronic intussusception are relatively frequent, but they are almost invariably of an innocent nature. This case proved to be one of malignant tumour, occurring very high up in the small intestine, and its presence was not detected until the more acute symptoms of upper intestinal obstruction were well established. No doubt the tumour was the cause of the symptoms for which the first laparotomy was performed. At that time there was nothing obvious in connection with the stomach, duodenum, or jejunum; and unless the whole length of the small intestine had been delivered and examined, it is unlikely that this tumour would have been detected.

3.—Volvulus.

Volvulus of the jejunum. This patient, a man of 56 years, was admitted to hospital with four days' history of acute intestinal obstruction. The early fæcal nature of the vomiting and the distension of the upper abdomen indicated an obstruction high up. At the operation, about 5 feet of the jejunum, near the duodenum, was found twisted on itself. It was obstructed and congested, but there was no evidence of gangrene. The duodenum and highest jejunum were greatly distended, and the bowel distal to the volvulus was collapsed. The volvulus was untwisted and the abdomen closed.

After the operation, every possible attempt was made to obtain an action of the bowels; however, nothing was passed, and the patient died two days later.

Post-mortem examination showed that some contents had passed on to the lower segments of the small intestine, but there was still paralytic ileus of the volvulus portion, and of the bowel proximal to it.

This case is an example of one in which perhaps a better result might have been obtained had temporary jejunostomy been performed, even though drainage would have been required at a very high point in the jejunum.

4.—Adhesions.

Obstruction due to adhesions following unrelieved appendicular abscess. This patient, a boy of 11 years, was admitted to hospital with a 14 days 'history of acute abdominal pain, vomiting and distension. The prominent symptoms at the time of admission were those of acute intestinal obstruction. Laparotomy was performed; coils of small intestine were bound down in the right iliac fossa, where they formed the wall of an appendicular abscess. The proximal portion of the highest loop of intestine fixed in this position was considerably dis-

tended. The adhesion of this loop to the abscess wall was separated, with the result that perforation of the bowel wall occurred. The remaining adhesions were separated sufficiently to allow the removal of the appendix. There was no free pus present, but the nature of the adhesions was such that it was assumed that they had formed the wall of an abscess which had probably become evacuated into the bowel at some point. The loop of small bowel which by its adhesion had caused the obstruction, and in which perforation had occurred, appeared to be about half way along the small intestine. This loop was left outside the abdomen, and the proximal end drained by means of a rubber tube sutured into the lumen of the bowel. Ileostomy in this case relieved the obstruction, and the patient's general condition improved. Ten days later a second operation was performed in which the loop of intestine was separated from the abdominal wall and excised, an end-to-end anastomosis being made. The abdomen was closed, except at the lower part where a small rubber tube was left for temporary drainage. The subsequent progress was very satisfactory, the bowels acted normally, and the patient made an uninterrupted recovery.

A Guy's Man in Germany.

Ths Tourist's Paradise. Rooms for Fivepence.

They were not there. Had they quarrelled already? Had they pulled each other limb from limb on the Channel boat? Or had they reported each other to the police on landing at Ostend and been sent back to England in the interests of peace on the Continent? These thoughts rushed through my mind as I waited at the Nord Station, Brussels. My misgivings will be easily understood when I explain that the two men I was expecting were my old friends George Isaacs (sometime Mayor of Southwark, a prospective candidate for Parliament and a Labour leader of eminence) and Sergeant Frampton (a crusted old Tory of the old school and an ex-police officer). I had had no fears about the future should we all meet, for in the course of a long life I have acquired a conciliatory temper born of a non-partisan and judicial mind. I knew I could keep my friends from each others throats should they reach Brussels intact.

My fears were groundless, for suddenly they appeared with small baggage and a wealth of smiles. Freemasonry, I discovered, had been a bond of union.

Our objective was Germany, but my friends were anxious to get a general impression of the Belgian capital, so we spent a day in visiting the principal sights. The Sergeant wanted to see the haunts of law so we visited the Hotel de Ville and the Palace de Justice, scrutinising the police wherever we met them. The Mayor's chief interest was the House of the People, the headquarters of the Co-operative and Trade Union movements, an institution Anti-Clerical in sentiment, but one where a picture of Christ finds a place over the platform in a great conference hall. Twenty-four hours later we were at the station again, en route for Cologne. We had read and heard alarming reports of the hardships awaiting us, but time breeds scepticism in wise men and we were prepared to take risks. Nothing happened at the frontier; even the examination of passports was casual in the extreme. It was necessary to leave the train and to take tickets with German money. Forty minutes later we found ourselves under the protection of the French and once more it was our duty to detrain and take tickets in the same currency. In less than an hour we were in Cologne and in comfortable rooms at the Christian Hospiz. Our tickets had given my comrades their first impression of the value of marks to Englishmen. We handed thousands of them to the booking clerks, but on working out their value found we had only parted with a few pence. We gained good impressions of Cologne and Bonn in a very short time and then set off for the south.

Frightfulness.

We were now to experience hardship, or rather to see it, for the first time. The railway system in the central part of Germany is administered by the French and is almost in abeyance. The people will not tolerate foreign drivers and officials and so, instead of going to a distant town by a direct route, they go right round the country under the protection of native railwaymen. The result was that while our destination was Frankfort in the south, our train went round in a wide sweep, going very far north in the process, thereby avoiding the domain of the French. We shall never forget that journey. We took first class tickets because they cost the Britisher next to nothing. The platform at Cologne was a mass of people, who swarmed the train when it came in. In the rush we appeared to lose all chance of seats and for an hour or so stood with a crowd of uncomfortable people in the corridor. Then, impressed by our dignity as first class passengers, an official found us places in a second class carriage which had been reserved for the military. The train stopped frequently and at every station men and women (sometimes carrying babies) fought their way on to the train. And there they stood, crushed together for hours. In comparative comfort we were miserable from sheer

sympathy for our fellows. Eventually, ten hours after starting, we drew into Frankfort, and the only real troubles of our holiday were at an end.

WEALTH.

It was one o'clock on Sunday morning when we stood outside Frankfort station. The Mayor caught sight of a hotel opposite with lights burning in the lounge. An air of comfort surrounded it and, cost what it might, we would stay there for at least one night. We shall never lose the distinction, even though we die in the Workhouse. We have stayed in the Carlton Hotel, Frankfort—one of the most notable hotels in Europe. We halted at the door to read the notice: "No French or Belgians admitted." That didn't trouble us and we went straight forward to the bureau. We cared little what the army of officials thought of three ill-dressed and worn out Englishmen on that night. A dignified gentleman gave each of us a card in response to our request for "Drie zimmer." I looked at mine, "204 Zimmer. 230,000 marks." Even that

Going to a Youths' Service at Frankfort Cathedral.

had no effect. Comfort after an awful journey was the one essential and, after all, when we came to settle our account on the following morning, it only amounted to fourteen shillings in English money for a palatial bedroom and breakfast in the CARLTON HOTEL, FRANKFORT.

We were all much impressed by the city. Much of it belongs to the Middle Ages and the Mayor was forever using his camera. Sunday on the Continent always brings its surprises. We were specially struck by the presence in the city of boy and girl tourists, who may have come in from the country or who may have made a halt in a big town for a day of rest. Generally speaking they were about 17 years of age. They went about in pairs or groups. Boys and girls dressed exactly alike, wearing nothing but blouses and short breeches similar to those seen on the football field. They wore no hats and no stockings; their legs and necks resembled those of Hindoos. When I saw the first boy and girl my feeling was that there was something improper about their appearance, but the thought vanished in a moment. There was something about the form and carriage of these big children which suggested the very opposite. Their faces suggested some innate spirituality and if the truth be known, their conversation was no doubt on the plane of music and the other lofty things. We saw many such beautiful people in Frankfort and again in Heidleburg, and my impressions were those of my companions. In the afternoon we went to the Cathedral and found it thronged with young men and boys—members of the religious guilds of the town. The service ended with a procession of the whole congregation, who sang hymns with intense enthusiasm. There was no conductor, but everyone knew what to do in spite of the fact that there were no service books of any kind. When the fourteen priests and fourteen standard-bearers reached the High Altar at the close, the singing developed into an almost overpowering crescendo. We were only birds of passage and it was necessary to hurry to the hotel for our knapsacks, for we were to sleep in Heidleburg that night. On our way from the Cathedral, in a quiet little square, we were surprised to find a Salvation Army meeting in progress. The people wore the familiar uniform, but, while we couldn't understand what was said, we felt that the speaker was making a more reasonable appeal to a large crowd than we had heard from his comrades at street corners in London.

HEIDLEBURG.

So far we had been townsmen; now we were to set off for Heidleburg, which nestles at the foot of the hills which go down to the shores of the Neckar. Here we found rooms in the Victoria Hotel and dined in the garden at a very modest charge. For a day or so we wandered among the hills and along the shores of the river, and at the same time did our best to get an insight into the student life of the University. To this last end we spent an evening in the White Swan, a gathering place not only of undergraduates but of their elders too. We sat at a table in which were cut the names of young men of another generation. All round us at other tables were seated groups of students wearing fantastic little caps of wild colours. Every man had a large mug of beer, which was refilled from time to time. No one seemed to pay for anything until he left, and how accounts were settled I cannot understand. Curious ceremonies were gone through in that beer hall. When a man rose from a table to go home he shook hands first with the senior members of the group and then with everyone seated at the table. We noticed two young men come in together. Beer was set before them, they clinked glasses, stood up, raised hats to each other and then settled down for the

evening. Horrible as it sounds, I think the Sergeant would have accompanied me to the duelling centre had we known where to find it. In all parts of the town we found young men with their faces gashed in a savage way. Some we met with new wounds which had not had time to heal. There are still men about, evidently, who have not risen above the level of the monkey or the tiger. In comparison with other places we found Heidleburg expensive. The hotel was reasonable enough, but shopkeepers were asking prices which would be regarded as normal in England. We were poor men who had been supplied with lists of things wanted by our friends at home. So we turned from the university town and visited Mannheim, which disappointed us. We decided to take a short journey and stay at Carlsruhe. This was a good move and we stayed in an old-fashioned hotel at a shilling a night. We paid a visit to Stuttgart on the day when the mark fell to half a million to the £. The Mayor bought a doll for his daughter—a doll which will never break—the Sergeant set himself up in clothes for a long period, and I revelled in picture shops and stores which were stocked with lovely things. Borne down by parcels we returned to the station. In the course of our return journey to Carlsruhe we had conversations with men who were able to give us some real information about the social conditions of the country.

A Party of German Children.

Poverty and Wages.

We asked about the alleged poverty of the German student. The young men travelling with us admitted that they were comfortably off, but they said that generally the men in the colleges were suffering great hardship. We showed our friends a copy of the *Manchester Guardian* which contained an appeal for clothes and money for the sufferers. The latter part of the journey was spent with a middle-aged manufacturer who had spent most of his life in America and had returned to his own country during the war. He told us that he was returning from a conference of employers and trade union officials. Apparently such meetings are held once a fortnight in order to adjust wages to the condition of the mark. Prior to the meeting of that day the workers had been receiving 2,500 marks an hour or the price of half a pound of meat. On that day it was raised to 6,000 marks an hour. We explained to our friend that we were men of affairs really anxious to know the truth about things in his country. He appeared to have the friendliest feelings for England, where he spent his annual holiday. The mention of France made him throw his arms about. "We shall fight her yet," he said, "and win. She does not want our money so much as she wants our downfall. We were fools, fools, fools ever to give up our arms."

So another war may be seen during our lifetime. The war to end war bred war, as wars always must. Truly there is much of the monkey and the tiger in humanity and a great deal of the donkey.

Baden Baden.

The country claimed us once more and we made for Baden Baden. Funds were getting low and we turned with disdain from the hotels of the Carlton order. We found a small, clean hostelry, where we asked the price of rooms and whether there was a bathroom. The price, we learned, was fivepence and provision was made for the needs of civilised men. So we spent our last days guardedly but well. Baden is a smart health resort on the edge of the Black Forest. There is a wonderful town club open to all, with beautiful gardens, plenty of music, good restaurants, etc., etc. Small mountains encircle the town and palms and flowers are everywhere. The season had not commenced when we left, but there were a few of that inane, idle and mincing class promenading through the gardens and proclaiming, even with their manner of walking, that they have never justified their existence in any way and never been anything but clothes props and food consuming machines. I used to watch the anger

of the Mayor and now and then I fancied that the Sergeant felt uncomfortable.

TROUBLE.

No crowd was leaving Germany when we made our way to Strasbourg, but the journey was slow. The ordinary trains had ceased to run, but a steam tram made the journey, stopping every few minutes at some little group of dwellings. Every now and then officials wanted to see our passports and sometimes we would get out and run races with the tram, to the manifest delight of the driver. At last the single spire of Strasbourg Cathedral came into view, and here and there we passed Alsatian women wearing enormous head-dresses of broad, black ribbon. Suddenly we discovered that our journey was at an end; before us stood the Rhine Bridge. We passed through the German customs quite easily. The Mayor passed through with a new camera and the doll for Joyce. Then anxiety stared us in the face. Across the road was the French customs office. I led the way. One officious young man was in charge. He ordered me to open my bag. One by one little things and big things were confiscated. A few English coins disturbed my master. A razor I had used for a year was placed upon the counter and twelve cigarettes were taken from me. Then a higher official appeared who, on learning that we were bound for England, sided with me, to the disgust of the younger man. It was a nerve-wracking experience; I thought I had lost my all. Both my friends escaped examination and the Mayor told me with evident delight that he and the Sergeant were withdrawing things from their bags during my ordeal and depositing them in their pockets. The Sergeant, I learned, had bought two underskirts in shot silk for Mrs. Frampton, and was on the point of putting them on in the hope that he might be mistaken for a Scottish highlander. The higher official arrived just in time.

GENERAL IMPRESSIONS.

We met with the greatest kindness everywhere. It is evident that the Britisher is popular in Germany. The Kaiser is still in a state of eclipse. He is never mentioned and his picture is never seen. We left an English camera in a restaurant at Mannheim one night and the waiter took considerable trouble to find us. No one appeared to overcharge us. Passports were never carefully examined, but one morning the police called to see them at 7 a.m., while I was out for my early morning stroll. On a hotel form one day I filled in the Mayor's profession as "Agitator." Even that caused no one to be unfriendly. We were all interested in the general condition of the people. It was difficult to come to any general conclusion, but it must be admitted that we saw little or no poverty. The people seemed to be properly nourished, clean, fairly well dressed and vigorous. The children seemed well cared for and happy. The shops are full of truly splendid things, but visitors seemed to be the only customers. In the course of a fortnight we saw something of nine German towns. It was a great experience. It laid to rest many preconceived ideas and it provided certain conclusions—some grave and some gay. We were all extraordinarily happy, but now and then the certainty of another war came home to us as a reality.

T. P. STEVENS.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Medical School.

DEAR MR. EDITOR,—May I utilise your columns for the purpose of thanking all those who acted as Stewards on Monday last, for their willingness to help and for the very efficient way in which they carried out their duties. The School is very much indebted to them.—I am, yours faithfully,

T. B. JOHNSTON, *Dean.*

The Fallacy in the Modern Treatment of Secondary Syphilis.

SIR,—The remarks of Dr. Robert S. Wainewright under the above heading seem to call for some comment. My only excuse for venturing to do so is that by reading his article some of your readers may get an erroneous view of the Modern Treatment of Syphilis.

He does not bring forward any evidence that mercury and salvarsan do not kill the spirochoeta pallida and cure syphilis, the generally accepted opinion is that the latter alone and more readily in conjunction with the former certainly does.

The remarks of Bristowe and of Jonothan Hutchinson which he quotes were written long before the diagnosis of that disease was revolutionised by the discovery of the spirochoeta pallida and the Wasserman reaction, and the treatment by the introduction of salvarsan compounds.

The late appearance of the secondary eruption after mercurial treatment which was sometimes noticed in those days was an evidence that the amount of the drug taken was insufficient to cope with the disease. Surely he is aware of the fact, that, if the combined treatment is properly given, not only do all the manifestations completely disappear, but they never come again, the patient remaining free from active signs, and further, the Wasserman reaction of his blood becomes negative

and remains so without any further treatment, for, as far as one can judge at present, the rest of his life; in other words he, or she, is cured. If as he says it is necessary to combat urgent symptoms with mercury *and salvarsan*, why not make a job of it and give the patient enough for a cure.

Syphilis may be transmitted by inheritance more than a year or two after the secondary stage and, more than that, often is. Hutchinson, as shown in his later writings, was aware of that fact, and a number of examples of this are given in the case histories recorded in Findlay's "Syphilis in childhood."

P. C. P. INGRAM.

DEAR SIR,—On page 250 of your last number you tell us that "houses are being totally destroyed at the Borough end of the street" (*i.e.*, St. Thomas's Street). On page 254 Mr. Boland makes a very interesting reference to Keats. Is this juxtaposition another example of the "undesigned coincidence"?

We have yet to learn which house in St. Thomas's Street Keats inhabited after moving round the corner from 8, Dean Street (now Stainer Street). Perhaps one of your readers can tell us exactly how much land St. Thomas's Hospital occupied and so at least narrow the field of conjecture. Sir Sidney Colvin, whose magnificent book on Keats (Macmillan, 1917) you have never reviewed, does not know even the name of the landlord, giving the two variations, "Markham" and "Mitchell," of the name of the tallow chandler over whose shop Sir Astley Cooper's poetical dresser lodged. Hence we cannot get much further towards an answer to Browning's question: "What porridge had John Keats?" But at least we can do what lies within our power. Will yours, sir, be the honour of conducting a successful agitation for the proper commemoration in Guy's of Guy's greatest man? Two of your predecessors have had to correct their published statement that Keats never qualified. You know better than that, and can lead a positive advance. In February, 1921, Sir William Hale-White wrote to *The Times* suggesting a Keats memorial ward, and you pleaded that there might at least be "some recognition by the Hospital of the fact that Keats was a Guy's man." You further reprinted the admirable article "Junkets," and issued a portrait of Keats as a supplement.

But that is all—so far. There is nothing—so far as I know—in the Hospital to suggest that "Keats was a Guy's man" unless it be a small portrait in the private office of the Treasurer's Clerk. The notebook of Keats's anatomy lectures (with his sketches of flowers in the margins) still reposes in a locked glass case in the Hampstead Public Library, and there is no facsimile in our Museum of Antiquities.

What the world thinks of Keats may be judged by an article in *The Times Literary Supplement* on the occasion of his centenary, in which the writer held that there were passages in Shakespeare which no one else could have written except Keats, and that there were passages in Keats which no one else could have written except Shakespeare. What we think of Keats—— But the bicentenary of the Hospital draws on apace and you will do your best, won't you, Sir?—Yours, etc.,

ALFRED G. HARRIS.

A Lay of Yung-Sin

(FROM THE CHINESE).

A Chinese boy, whose name was Yung-Sin,
Was the son of a high Mandarin;
His ma's name was Li; in descent she was high;
And her parents bethothed her to Sin.
That is, old Sin, the father of Yung,
A friend of the father of Li's.
Though his jacket was yellow, he was not a bad fellow,
Nor so base as the father of Li's.
Now this father of Li's, with old and Yung-Sin,
Were all partners in business together;
And they all seemed to thrive in their schemes for a time,
In all seasons, and all sorts of weather.
Till T. Rooth arrived, and set up a shop,
With On-Ur for a foreman and chief.
But the great Mandarin, with the button atop,
Called him traitor, and humbug and thief.
But T. Rooth persevered, gave old Sin a wide berth:
Keeping On-Ur well up to the mark,
Till Yung-Sin and Old Sin, the father of Li's,
Found their light was the darkest of dark.
But T. Rooth was slow, and On-Ur was slow too,
And poor was their wealth, at the first;
But, after some years, they were both well to do;
While the Sins died from hunger and thirst.

L'ENVOI.

From this you will see that if when you begin,
Or commence, any business or pleasure,
It is best to avoid, from the first, Li's and Sin
In work time or playtime or leisure.
Choose honour and truth as your partners for life.
And fear not what Fortune may send;
They may seem to be slow, and to bring only strife.
But are sure to come right in the end.

United Hospitals Swimming Club.

GUY'S v. ST. BARTHOLOMEW'S

(Semi-final).

The semi-final ties for the Inter-Hospital Water Polo, Swimming and Diving Cups were swum off at Pitfield Street Baths on Friday, 22nd June. The side was supported by a goodly number of Guy's men, whose cheering did much to help in bringing about the happy result. The diving ended in a tie, with Marsh first and Hodge (Bart.'s) and Day (Bart.'s) second and third respectively. In the "dive off," however, J. D. S. Thomas came up to first place, with Marsh second. Points for the Swimming Cup were equal up to the Team Race, which Guy's won by three yards. The Water Polo was a fast game, in which Guy's always had the upper hand; there was some very good passing and manœuvring for position. Brown succeeded twice in breaking from his man in mid-pitch, and scored two excellent goals. Day and Abernethy, the Bart.'s "stars," were not given much opportunity. Richards in goal played a very safe game.

Diving Cup.

1, J. D. S. Thomas (Guy's); 2, A. R. Marsh (Guy's); 3, B. Hodge (Bart.'s).

Score.—Guy's, 8pts.; Bart.'s, 2pts.

Swimming Cup.

One Length.—G. H. Day (Bart.'s); 2, H. J. Harker (Bart.'s); 3, F. Bekker (Guy's) and W. F. C. Tucker (Guy's).

Score.—Bart.'s, 8pts.; Guy's, 2pts.

Two Lengths.—1, D. Abernethy (Bart.'s); 2, A. R. Marsh (Guy's); 3, F. R. Dingle (Guy's).

Score.—Guy's, 5pts.; Bart.'s, 5pts.

Four Lengths.—1, S. E. Theis (Guy's); 2, H. Richards (Guy's); 3, D. A. Abernethy (Bart.'s).

Score.—Guy's, 8pts.; Bart.'s, 2pts.

Team Race.—F. R. Dingle, J. A. Simons, A. R. Marsh, R. Schofield, W. F. C. Tucker, F. Bekker.

Score.—Guy's, 10pts.; Bart.'s, 5pts.

Total score.—Guy's, 25pts.; Bart.'s, 20pts.

Water Polo.

H. Richards, J. Simons, F. R. Dingle, C. A. Wakeford, L. Brown, S. E. Theis, F. Bekker.

Score.—Guy's, 5 goals (Brown 2, Wakeford 2, Bekker 1); Bart.'s, 0.

UNITED HOSPITALS GALA.

The Annual Gala of the U.H.S.C. was held, by kind permission of the Bath Club Committee, at the Bath Club, Dover Street, W., on Friday, 29th June, at 7.30 p.m. Sir Alfred Fripp presided, and Lady Fripp kindly presented the Cups and Medals. Lady Alexander very kindly undertook to organise the sale of programmes—to such effect that the Club Funds have received considerable benefit. Each hospital was well represented, and all available tickets had been allotted long before the day of the Gala. Once more it proved to be a "Guy's Night," each Inter-Hospital trophy falling into our our hands. The Nurses' Swimming Club is to be congratulated on winning Lady Fripp's Cup for the third year in succession; their success is due in no small measure to the enthusiasm shown in training, and to Lady Fripp's careful coaching. A. R. Marsh and J. D. S. Thomas won back for us the Diving Cup, which was lost to the London Hospital last year. Honours were even in the two and four lengths races, but by obtaining first and second places in the one length, and winning the Team Race (this last by over half a length), we succeeded in retaining the Swimming Cup. The final of the Inter-Hospital Water Polo Cup provided an interesting game, in which Guy's completely outplayed King's College Hospital. L. Brown played a fast and clever game, and his shooting was excellent; while the other members of the team marked their men very closely, and King's never looked like scoring.

Diving Cup.

1, A. R. Marsh (Guy's); 2, J. D. S. Thomas (Guy's); 3, H. N. Knox (King's).

Score.—Guy's, 8pts.; King's, 2pts.

Swimming Cup.

One Length.—1, F. Bekker (Guy's); 2, W. F. C. Tucker (Guy's); 3, W. N. P. Wakeley (King's.

Score.—Guy's, 8pts.; King's, 2pts.

Two Lengths.—1, W. N. P. Wakeley (King's); 2, F. R. Dingle (Guy's); 3, A. R. Marsh (Guy's).

Score.—Guy's, 5pts.; King's, 5pts.

Four Lengths.—1, H. N. Knox (King's); 2, S. E. Theis (Guy's); 3, H. Richards (Guy's).

Score.—Guy's, 5pts.; King's, 5pts.

Team Race.—F. R. Dingle, J. Simons, A. R. Marsh, R. Schofield, W. F. C. Tucker, F. Bekker.

Score.—Guy's, 10pts.; King's, 5pts.

Total score.—Guy's, 28pts.; King's, 17pts.

Water Polo.

H. Richards, J. Simons, F. R. Dingle, C. A. Wakeford, L. Brown, S. E. Theis, F. Bekker. Guy's, 6 goals (Brown 4, Wakeford 1, Bekker 1); King's, 0.

Lawn Tennis.

SEMI-FINAL OF SENIOR INTER-HOSPITAL LAWN TENNIS CUP.

Played at Honor Oak Park on June 30th, resulting in a win for Guy's by 8 matches to 3.

Singles.

Nurick lost to Summers, 6—1, 2—6, 4—6.
Neser beat Pearson, 6—2, 6—3.
Lewis-Philipps beat J. G. Johnston, 6—3, 6—1.
Sharpley beat Gibson, 6—4, 7—5.
Schlimmer beat Stuart-Low, 6—2, 6—1.
R. F. Johnston and Jackson did not play their single.

Doubles.

Jackson and Neser—
Lost to Johnston and Johnston, 4—6, 0—6.
Beat Summers and Pearson, 6—3, 6—3.

Nurick and Lewis-Philipps—
Beat Summers and Pearson, 9—7, 2—6, 6—4.
Beat Low and A. N. Other, 3—6, 6—3, 6—1.

Schlimmer and Sharpley—
Lost to Johnston and Johnston, 6—3, 6—4.
Beat Low and A. N. Other, 6—3, 6—2.

GUY'S LAWN TENNIS CLUB.

The semi-final of the Junior Inter-Hospital Challenge Cup against St. Bartholomew's Hospital took place at Winchmore Hill on Saturday, June 30th, and resulted in a win for Guy's Hospital, after some very hard-fought games, by 8 matches to 5—one unfinished and one unplayed.

Results as follow:—

Singles.

Potts beat Loveday, 6—2, 8—6.
Schollum beat Mackenzie, 4—6, 7—5, 6—0.
Morgan beat Milner, 6—2, 6—3.
Yew lost to Farr, 4—6, 3—6.
Becker beat Corkery, 6—3, 6—1.
Owen v. Macfadyn, unplayed.

Doubles.

Potts and Yew—
Lost to Loveday and Farr, 5—7, 5—7.
Lost to Mackenzie and Milner, 6—4, 5—7, 3—6.
Beat Corkery and Macfarlane, 6—3, 6—2.

Becker and Morgan—
Beat Loveday and Farr, 3—6, 6—2, 6—1.
Lost to Mackenzie and Milner, 7—9, 5—7.
Beat Corkery and Macfarlane, 7—5, 6—3.

Schollum and Owen—
Lost to Loveday and Farr, 0—6, 2—6.
v. Mackenzie and Milner, 8—10, 6—4 (unfinished).
Beat Corkery and Macfarlane, 6—3, 7—5.

Pass List.

University of Cambridge.

3rd Examination for Medical and Surgical Degrees.

EASTER TERM, 1923.

PART I.

Surgery, Midwifery and Gynæcology.

L. S. Fry. G. T. Henderson.
G. C. Millis.

PART II.

Medicine, Pathology and Pharmacology.

C. G. Taylor.

2nd Examination for Medical and Surgical Degrees.

EASTER TERM, 1923.

PART I.

Human Anatomy and Physiology.

A. T. Curnow. A. F. W. Hall.

Papers by Guy's Men.

E. B. Dowsett, D.S.O., M.R.C.S., L.R.C.P. Pathology and Treatment of Periodontal Disease (Pyorrhœa Alveolaris).—*Brit. Dent. Journ.*, xliv., 1923, p. 620.

R. P. Rowlands. Acute Intestinal Obstruction.—*Clinical Journal*, 1923, p. 277.

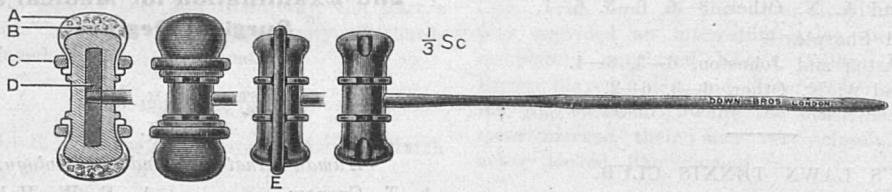
F. N. Doubleday, M.R.C.S., L.R.C.P., L.D.S. On the Extraction of the Teeth.—*Brit. Dent. Journ.*, xliv., 1923, p. 699.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The "Universal" Percussion Hammer.

A neatly made and well balanced Percussion Hammer is always a useful tool on the table of a diagnostician. With the above instrument it is thought that the physician can employ all the different methods of percussion without having to change his instrument.

The instrument, in addition to a smooth hard head, has rubber caps which can be slipped over the end, and these can be used for either hard or soft percussion. When the rubber caps are filled with wool and one cap is saturated with hot and the other with cold water the detection of thermo-anæsthesia is easily made in such a way that a deliberate error in the patient's answers is easy to detect.



Below is a detailed description of the method of use. It can be used :—

(1) For the ordinary methods of percussion.

(2) For the detection of certain diseases of the nervous system.

(1) For ordinary percussion in defining the boundaries of the heart (superficial and deep dullness) and other internal organs, e.g., the liver.

For the condition of the lung, e.g., in Tuberculosis. The force of percussion can be varied owing to the flexibility of the handle. The mallet head may be used plain or covered by the rubber capsules, or a small plug of cotton-wool or a sponge may be inserted under the capsule so as to modify the stroke.

(2) For eliciting the nerve reflexes the hammer can be used as above, or the longer rubber ring may be applied along the entire length of the mallet head.

It can be used for percussing at either end of the head or along its side, thus affording a more extensive surface (like the edge of the hand) for eliciting the knee-jerk either at the patella or higher up above the knee.

The padded extremity is also useful for obtaining the jaw-reflex, the supernator and pronator wrist-jerks and the adductor foot-reflex by striking (with the extremity of the mallet head) along the border of the foot towards the heel.

The instrument is especially suitable for testing thermo-anæsthesia, which is necessary in the diagnosis of Syringo-myelia, Syringo-bulbia and for Brown-Sequard's syndrome. The pointed and rounded extremity of the handle enables the plantar extension-reflex (Babinski's sign) to be readily tested for.

By inserting a pledget of cotton-wool or a small sponge wetted with cold water at one extremity of the mallet head under the capsule (fixed with a small rubber ring), and similarly with warm water at the other, the sensations of heat and cold are readily tested and the appearance of both ends being similar, the patient cannot detect, except by sensation, which extremity is warm or cold.

The instrument maintains its temperature for some time and so enables repeated tests to be made without further manipulation.

The shape of the hammer prevents it rolling off the table.

It is neither rigid throughout, nor heavy.

It is well-constructed and neat and suitable for the consulting-room.

The sole makers are Messrs. Down Bros., Ltd., 21 and 23, St. Thomas's Street, London, S.E.1.

Birth.

HALSTEAD.—On the 20th June, at Purley, to Eileen (née Rowlett), wife of Oliver Halstead, a daughter.

Deaths

NEWNHAM.—On June 23rd, at 3, Lansdown Place, Clifton, Bristol, Kathleen Mervyn, wife of Dr. W. H. C. Newnham, second daughter of the late W. C. Beloe, Esq., and Mrs. Beloe. No flowers by her special request.

POLLARD.—At Burns Cottage, Moffat, on June 19th, 1923, George Richard Macintosh Pollard, M.R.C.S., L.R.C.P.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

IT will be remembered that in the issue of the GAZETTE of the 10th June, 1922, subscriptions were invited to endow a small prize in appreciation of the services of Dr. Laidlaw, the prize to be awarded annually to the student who should read the best paper on a pathological subject before the Physical Society. Subscriptions have come in, and a Fund has been established for the purpose of awarding the Laidlaw Prize.

In putting the matter into legal trim it has been suggested that the condition attaching to the Award of the Prize should take the following form:—

> The Candidate to receive the Laidlaw Prize shall be a Student for the time being at Guy's Hospital who has not completed two years of Clinical Study at the beginning of the Session and who during the same Session shall have either produced or shown at a Meeting or Meetings of the Pupils' Physical Society the specimen of the greatest pathological interest or have read a paper of the greatest pathological interest.

It may be suggested that the above condition departs slightly from the terms upon which the subscriptions were originally invited, and as the promoters are naturally anxious not to make any such departure without the consent of all parties concerned, they are publishing the Clause above so that any Subscriber who sees any objection to the altered condition will have an opportunity of giving voice to his objection.

Communications, as before, should be sent to—The Hon. Secretary, Pupils' Physical Society.

Should the above plan be adopted, it will necessitate a slight re-adjustment of the Society's other Prizes, and this matter will be considered at the next General Meeting of the Society in October.

OUR heartiest congratulations to Mr. M. Jackson who was recently awarded the Treasurer's Gold Medal for Clinical Surgery, and to Mr. N. L. Lloyd who was awarded the Gold Medal for Clinical Medicine.

IN a previous issue we published an appeal to old Guy's men for their support on behalf of

Dennis Sanford, son of an old Guy's man, who was seeking election to Epsom College. We are pleased to state that in the recent election he was awarded a Foundation Scholarship, and on behalf of Mrs. Sanford, a letter from whom we publish on another page, we wish to thank all those who answered the appeal and helped to procure this success.

We regret the tardy appearance of the photographs which we publish in this issue. They were received too late for inclusion in our last number, but we offer no apologies for their appearance at this stage. They afford an interesting record of a great step forward in the history of the Hospital and its Medical School.

We notice, with great pleasure, the success of the latest effort to grow grass in the Park. There is now, apparently a shortage of lawn mowers in the Hospital. Or is the shortage merely a latent one? Perhaps the grass that has grown is left long to cover up the bare patches where it has not grown! A further solution, of course, may be that the only lawn mower has grown rusty through disuse and is now being hastily repaired.

We hear that a new record has been achieved in B.B.A.'s. They are all progressing favourably, and the doctor is still asleep. No further bulletins will be issued unless the occasion demands.

Pass List.

University of Oxford.

D.O. (Oxon).

Oscar Graydon Hume.

Guy's Hospital Lawn Tennis Club.

The final of the Senior Inter-Hospital Tennis Cup between Guy's and King's College Hospital, played on Wednesday, 11th inst, resulted in a win for Guy's by 9 matches to 1.

Singles.

L. Nurick beat Gawler, 6—2, 6—1.
M. Jackson beat Dauncey, 6—2, 6—3.
E. Neser beat Playfair, 6—3, 9—7.
R. Schlimmer beat Osborn, 6—2, 6—4.
E. Sharpley beat Collis, 6—2, 6—4.
J. Badenhorst v. Kohnstaman, 6—3, 1—6 (unfinished).

Doubles.

Jackson and Neser—
Beat Gawler and Bell, 7—5, 9—7.
Beat Playfair and Collis, 6—4, 2—6, 6—4.

Nurick and Schlimmer—
Beat Playfair and Collis, 6—2, 6—1.
v. Osborn and Dauncey, 2—6, 6—1 (unfinished).

Sharpley and Badenhorst—
Lost to Osborn and Dauncey, 8—6, 4—6, 6—8.
Beat Gawler and Bell, 7—5, 6—4.

The final of the Junior Inter-Hospital Tennis Cup between Guy's and King's College Hospital resulted in a win for Guy's by 9 matches to 0—the rest being unplayed.

Singles.

Potts beat Munro, 6—3, 6—1.
Schollum beat Albertqueque, 6—3, 6—4.
Morgan beat Knox, 6—0, 6—2.
Yew beat Adlington, 6—4, 6—1.
Becker beat Dyer, 6—2, 6—1.
Owen beat Brockington, 6—3, 6—0.

Doubles.

Becker and Morgan—
Beat Munro and Albertqueque, 3—6, 6—1, 6—2.

Potts and Yew—
Beat Knox and Brockington, 6—4, 6—1.

Schollum and Owen—
Beat Udlington and Dyer, 6—0, 6—1.

Change of Address.

E. H. Adams, 25, Balance St., Uttoxeter.

K. M. C. Woodruff, M.B., B.S. (Lond.), 33, Nottingham Place, W.1. (Tel. No.: Mayfair 5389).

Papers by Guy's Men.

R. G. Heegaard Warner, L.D.S. The Business Side of Dental Practice.—*Brit. Dent. Journ.*, xliv., 1923, p. 753.

Final Fellowship Course.

Notes on First Test Paper.

The average examiner is old and conservative. He sits down to read your paper in the evening, when he is tired. He doesn't take the slightest interest in you, and if he did, he only knows you as a number. Therefore anything which makes it easy for him is one up to you.

Methodical arrangement is most important, writing next, facts last. Nobody can know all the facts about any question; if he did he couldn't got them down in an hour. Therefore, before starting, first summon all the facts you know, then arrange them, then write. An essential fact put in out of place is more irritating than if omitted. Diagrams save you time and the examiner trouble, but they must be scrupulously accurate. An inaccurate fact may be illegible, an inaccurate diagram cannot be missed. Any fact of which you are not sure should be scrapped, however nice it sounds. Avoid the personal touch, and *never* be funny.

A good answer, like Gaul, has three parts.

I. Tell them what you are going to say.

II. Say it.

III. Tell them what you have said.

In the hour allotted to you, spend:—

10 min. on thinking and scribbled notes.

2 min. on Part I. Introduce your subject, and say how you are going to divide it up.

45 min. on Part II. Thrash it out methodically under headings up to a grand finale, slamming in every fact you can, as long as it is accurate.

3 min. on Part III. Summary. Epitomise the conclusions, pointing out which are essential and which incidental.

60 min.

For example—

Skeleton Outline of Answer to Question 2.

The signs and symptoms of a cerebellar tumour.

Part I.

These are produced by:—

1. Destruction or irritation of Cerebellum itself.
2. Pressure on neighbouring parts.
3. Interference with circulation of CSF.
4. Displacement of Cerebellum and secondary increase in tension.

They fall under three main headings:—

1. Those common to all intracranial tumours, and due in the main to a rise in intracranial pressure.
2. Those due to pressure on other structures in the subtentorial space.
3. Those due to irritative or paralytic lesions of the Cerebellum itself.

Part II.

I. *Characters of Intracranial tumours generally.*

1. Mental. Drowsiness, slow cerebration, apathy, delirium, etc. Not at all characteristic. When present, very late and due to obstruction of CSF and internal hydrocephalus.
2. Headache. May be occipital. Usually not localised. Local tenderness to percussion over occiput much more characteristic.
3. Vertigo, very common.
   (a) General giddiness with no apparent cause.
   (b) Sense of rotation of self.
   Intracerebellar, from diseased to sound side.
   Extracerebellar, reverse way.
4. Vomiting without cause or nausea. Specially marked in cerebellar.
5. Optic neuritis, specially early and marked. Most on side of lesion. Early limitation of blue field.
6. Fits. Not characteristic. Late, and mean cerebral change.

7. Pulse slow. Late.
8. Temperature subnormal. Late.
9. Respiratory changes. Cheyne-Stokes. Late.
10. Lumbar Puncture. Increased tension. Cells may indicate nature of lesion.
11. X-ray. In raised tension, grooves of diploic veins become more obvious.

II. *Pressure on neighbouring structures.*

1. Nerves. (Expand this of course.)
   V. to XII. may all be involved. VI., VII., VIII., are all common, the others uncommon. III., IV., rare.

   Describe irritative and paralytic lesions, e.g., with VIII. we get first tinnitus, then deafness.
2. Pyramidal tracts, causing paresis and increased jerks on opposite side.
3. Medullary centres, causing vasomotor reflex protective mechanism.
4. Obstruction to flow of CSF, causing internal Hydrocephalus, cortical symptoms, fits, mental changes, etc

III. *Signs of Cerebellar Injury.*

1. Eyes. Nystagmus, lateral. Coarse to same side, fine to opposite.

   Conjugate deviation to opposite side. Weakness of conjugate movements.

   Skew deviation.

   Tendency to look to side of lesion in walking.
2. *Muscles.* Asthenia.

   Atonia, causing "reversed Kernig."

   Ataxia, causing gait "dysdiadochokinesis."
3. *Gait and attitude.* Staggering.

   Tends to fall to side of lesion.

   To stop this, walks with legs straddled and shoulder of affected side raised.

   Lies curled, with affected side up.

   Head back and to side of lesion.

   Looks to side of lesion walking.

   Upper limb paresis same side.

   ?Stiffness of neck.

Part III.

The Cerebellum is the "head ganglion" of the proprioceptive senses, chiefly the vestibular and non-conscious afferent muscle impulses. Ataxia is the characteristic sign of disturbance of these senses or their head ganglion. It may be present in disease of cerebellum, semicircular canals, or posterior columns of cord. In lesions of the cerebellum the presence of signs of interference with other structures in the subtentorial space is one of the chief helps in diagnosis.

Notes on Question I.

The special features of the internal jugular are:—

1. That it is the main path by which the blood is returned from the brain, skull, scalp, and face.
2. That it is surrounded throughout its length by glands which are the end lymphatic station for everything above the clavicle.
3. That it is close to the right side of the heart, and trauma is much more dangerous than in other veins, owing to risk of air embolism.

The main indications for tying it are:—

A. To prevent spread of septic clot or bacteria into general circulation.
   1. Lat: Sinus thrombosis from middle ear—far commonest.
   2. Lat: Sinus thrombosis from other causes, osteomyelitis of cranial bones, infection via emissary veins, etc.
   3. Rigors in peri-sinus infection, showing that organisms are being let loose in circulation, even in absence of thrombosis.
   4. Septic thrombosis of other main branches, e.g., common facial in erysipelas.

B. Where surrounding structures cannot be separated from vein, or where their separation would mean incomplete removal.
   1. T.B. glands.
   2. Malignant glands, primary or secondary—block dissection.

3. Malignant growths, not glands —
   Parotid and Submaxillary.
   Thyroid.
   Larynx and fauces.
   Tumours of Carotid body. Branchial Carcinoma.
4. Granulomata, Gumma, Actinomyces.
5. Arterio-venous aneurysm.

C. Trauma of vein, where the injury is too large for a lateral ligature.
   Cut throat.
   G.S.W.
   Accidental tears in extensive operations.

NOTES ON QUESTION III.

The Umbilicus lies on the level of the 3rd Lumbar vertebra and the highest point of the Iliac crests. In most individuals the space between the tip of the 11th rib and the Iliac crests is only about 1 inch, at any rate much less than the breadth of a decent cart wheel.

Therefore the parts that may be injured are:

I. *Parietes.*

Skin and soft parts.

*Abdominal muscles, especially if accident is foreseen, and muscles are contracted.

Don't forget posterior muscles, especially Psoas.

Iliac crests. Partial fracture.

Springing apart, possible injury to sacro-iliac joints, pubic bones, urethra.

Lower ribs, leading to—injury to Liver, Spleen, Lungs or pleura, Hæmo- or pneumothorax.

Spine.—Fracture of spines or laminæ.

Fracture of bodies.

Injury to cord. N.B.—at this level it is a cauda equina lesion. Therefore, if depressed laminæ, always operate.

II. *Abdominal Viscera.*

Those lying in the Umbilical plane, or within $1\frac{1}{2}$ inches either side of it, are:—

1 Stomach, greater curve.
2. Lower part of duodenal arch.
*3. Commencement of jejunum, just below flexure.
*4. Head of Pancreas—may lead to Ac. Pancreatitis.
5. Commencement of supremesenteric vessels. May tear, or later thrombose.
6. Lower poles of both kidneys. Ureters.
7. Transverse colon and omentum.
8. Upper end of ascending and descending colon.
9. Aorta. Inferior Vena Cava.
10. Bladder, when distended.
11. Abnormal structures. Meckel, large gall bladder, ovarian cyst, etc.

* Most probable injuries.

POINTS.

1. Injuries of muscular wall can generally be distinguished from injuries of viscera by fact that relaxation of suspected muscle decreases pain and tenderness. Shock goes early.

2. Retroperitoneal hæmorrhage gives rise to "peritonism" very like peritonitis, but
   (a) Rigidity is not so complete, and is more protective than real. Decreased when attention distracted.
   (b) Pulse not correspondingly high. Does not go on climbing.

When in doubt, far safer to open. Diagnosis may be made too fine an art.

3. Persisting local tenderness and rigidity is an absolute indication to open. It precedes the rising pulse.

4. Rupture of liver or spleen are indicated by,
   (a) Signs of internal hæmorrhage.
   (b) Steadily increasing dulness and tumour. This follows the right and left paracolic gutters respectively. The dulness may be disminished, but not abolished, by change of position.

5. If you want to know any more, read *B.M.J.*, October 22nd, 1921, p. 639.

Guy's Hospital Medical School.

Students' Appointments.

July 16th—October 15th, 1923.

Clerks to Medical Units (Second Three Months).—(Dr. Fawcett) Messrs. A. V. Clemmey, H. N. Collier, R. W. Cunningham, D. C. Drake, H. E. Filmer, G. R. Ford, J. L. Groom, L. E. Houghton, W. B. Norcott, W. G. Sears, A. C. Taylor, E. C. Warner, H. P. Yew; (Dr. Beddard) Messrs. M. T. Aung, E. Bowen-Jones, B. M. Francis, C. H. Highfield, A. E. Hill, H. Kessel, J. Maingard, H. Moore, S. R. G. Pimm, H. van der Post, J. C. T. Tregarthen, W. S. Whimster, C. L. Worthington; (Dr. Hurst) Messrs. M. McC. Baird, L. J. Barford, N. F. C. Burgess, G. Davies, R. W. Edwards, C. L. Frochlich, J. Gray, H. E. Harding, J. R. B. Hern, J. A. A. Mekelburg, F. C. Miller, J. W. Schollum, F. Widlake, H. G. Wimbush.

"A" Dressers to Surgical Units.—(Sir A. Fripp) Messrs. A. A. Dalby, A. Elliott, J. N. O'Rafferty, H. Trafford, H. H. Steadman, F. A. Wilson; (Mr. Steward) Messrs. S. Cieman, P. C. Cumber, A. C. Hampson, W. K. Targett, J. G. S. Thomas, J. W. Shackle; (Mr. Fagge) Messrs. D. F. Durward, D. R. Martin, R. A. Norman, J. R. Ratcliffe, T. I. Williams, A. B. Plant; (Mr. Rowlands) Messrs. S. Berman, B. E. Hawkins, M. E. M. Jago, F. W. Schofield, T. St. Silvester, H. J. Selby.

"B" Dressers to Surgical Units.—(Sir A. Fripp) Messrs. J. L. Hopkins, R. H. El. Sawy, D. A. Skan; (Mr. Steward) Messrs. J. Dywien, T. M. Kellough, J. U. Humun, D. M. Lang; (Mr. Fagge) Messrs. R. N. Brandwood, V. L. Fisher, A. W. Riddolls; (Mr. Rowlands) Messrs. L. Bechal, F. H. K. Knight, L. Rhys-Jones.

Junior Dressers.—(Mr. Turner) Messrs. D. W. Lloyd, A. C. Lysaght, H. L. Peake; (Mr. Hughes) Messrs. I. C. Beauchamp, A. S. Gough, H. E. Lewis; (Mr. Davies-Colley) Messrs. C. B. Andrea, H. G. Davies, F. H. Pratt; (Mr. Bromley) Messrs. C. P. Blacker, R. V. Cookes, G. T. Hankey; (Mr. Slesinger) Messrs. S. B. Browning, J. Evans, B. Horwitz.

Obstetric Dressers and Externs.—(Mr. Chapple) Messrs. H. M. H. Ashwin, P. C. Bennison, H. E. Blake, S. C. M. Davison, C. J. Dobbin, S. F. Durrans, M. M. El Mishad, H. J. Fuller, D. R. Grant, D. F. Johnstone, R. M. Jones, J. G. Kingsbury, H. Lewis, H. P. F. Modder, W. J. Montague, J. E. Piercy, G. H. Pitt, J. Sellick, I. P. Spurrell, L. A. S. Trott, H. K. Williams, H. M. Worth; (Mr. Bellingham-Smith) Messrs. J. H. Broadhead, M. F. Butler, A. H. Brockbank, Ll. Davies, T. M. Fripp, D. S. Huskisson, H. C. Lee, R. R. Mackenzie, G. A. Martin, S. P. Meacock, C. F. Morrison, G. W. Murray, R. G. Nethery, W. G. Roberts, W. F. Roper, P. B. Skeels, J. D. S. Thomas, P. G. Trafford, T. G. Tresidder, J. M. Van Schalkwijk, C. H. C. White, R. G. Williams.

Clerks in the Children's Department.—Messrs. P. R. T. Becker, I. M. Benjamin, E. H. J. Berry, C. K. Colwill, L. F. Davies, F. R. Dingle, R. A. Dyke, A. T. Fripp, L. W. Houghton, M. H. Jacobs, A. I. Jowell, G. S. Landon, H. Levit, F. J. Levy, W. A. Mill, F. M. Newnham, R. Schofield, B. G. Scholefield, R. F. Smith, E. Sorabjee, A. Tom, R. L. Waterfield, W. P. B. Winston, J. C. Young.

Dressers in the Eye, Ear, Nose and Throat Dept.—

Ophthalmology.—(Mr. Eason) Messrs. W. H. Bradley, P. S. Court, C. S. Hallpike, S. P. Jacobson, C. H. C. Toussaint, H. C. Warner; (Mr. Ormond) Messrs. R. B. Fawkes, H. N. Hearle, W. S. Hunt, N. W. Mackeith, K. O. Parsons, W. R. Spurrell, H. J. W. J. Westlake.

Laryngology.—(Mr. Mollison) Messrs. R. B. Fawkes, H. N. Hearle, W. S. Hunt, K. O. Parsons, N. W. Mackeith, W. R. Spurrell, H. J. W. J. Westlake; (Mr. Layton) Messrs. W. H. Bradley, P. S. Court, C. S. Hallpike, J. L. Faull, S. P. Jacobson, C. H. C. Toussaint, H. C. Warner.

Clerks and Dressers in Special Departments.—

Genito-Urinary Department.—Messrs. A. Canard, W. H. Craib, E. F. Hewlitt, G. C. Hughes, E. I. Liberman, A. T. Powell, D. Vaughan, J. L. L. Walker.

Neurological Department.—Messrs. R. S. Chambers, G. T. Henderson, J. J. Laws, E. I. Liberman, H. Maclachlan, P. Martin, G. C. Millis, O. G. Morris, R. D. Owen, E. C. Seward, M. Taylor, D. Vaughan, H. D. Wyse.

Dermatological Department.—Messrs. E. H. J. Berry, C. K. Colwill, L. F. Davies, A. T. Fripp, L. W. Houghton, M. H. Jacobs, R. M. Jones, A. I. Jowell, O. F. A. Krause, G. S. Landon, F. J. Levy, W .A. Mill, W. J. Montague, B. G. Scholefield, A. Tom, W. P. B. Winston, J. C. Young.

Fracture Department.—Messrs. R. J. Cann, C. W. Greenway, E. H. Koerner, J. J. Laws, H. Levit, M. Rubinstein, M. B. Seng, R. F. Smith, M. Taylor.

Orthopædic Department.—Messrs. W. A. Caldwell, R. J. Cann, R. S. Chambers, H. G. Close, J. C. G. Dickinson, C. W. Greenway, J. C. Hewetson, J. S. Jacobsz, A. H. Jowell, E. H. Koerner, J. J. Lewinstein, E. E. Neser, M. Rubinstein, M. B. Seng.

Clinical Assistants.—Messrs. D. H. Berry, C. G. Bowen, N. L. Eckhoff, G. F. Gibberd, C. Ive, S. S. Suzman.

Insulin.

CLINICAL LECTURE BY E. P. POULTON, M.D.

Carbohydrate Metabolism.

Gentlemen,—I must give you, first of all, a very brief resumé of what we know about carbohydrate metabolism for my subsequent remarks about insulin to be fully intelligible.

Carbohydrate after absorption by the alimentary canal passes by way of the portal vein to the liver. Some of it is held back by the liver; but some passes straight through and enters the systemic circulation, as is shown by the rise in blood sugar after a meal. This extra sugar in the blood gradually leaves the circulation, so that the blood sugar is restored to its previous level. After taking 50 gms. of dextrose the blood sugar rises from 0·1 to about 0·15 per cent. in three quarters of an hour in a healthy person, and the blood sugar falls again to 0·10 in one and a half hours. In a patient with diabetes the rise is greater and the hyperglycæmia persists, so that the normal level is not restored even after three or four hours. The probable explanation is that in diabetes the liver allows more sugar than normal to escape into the circulation and also the tissues do not take it up so rapidly, so that the extra amount of sugar remains for a long time in the blood.

In a healthy person two sets of ductless glands regulate this metabolism of carbohydrate —the suprarenals, the thyroid, and probably the pituitary liberate their secretions into the systemic circulation, and these have the effect of raising the blood sugar and delaying its use by the tissues. The islands of Langerhaus of the pancreas deliver their secretion, viz., insulin, into the portal circulation, which passes to the liver and facilitates the conversion of dextrose into glycogen by the enzymes there, so that much of the dextrose after the meal is kept back in the liver, and the tendency for liver glycogen to break down at other times is also prevented. Insulin probably also passes to the other tissues and helps with the storage of sugar there in the form of glycogen. It has, in fact, been shown that on perfusion of the heart with dextrose, more of the latter is taken up by the heart when insulin is present in the perfusing fluid, than when it is absent.

In diabetes mellitus, and the same is the case with an animal whose pancreas has been partly removed, there is a deficiency of insulin, so that we find an increased blood sugar, a relatively small amount of glycogen in the liver, and a low respiratory quotient which means that the tissues have lost much of their power to burn up dextrose.

A brief mention made be made of Winter and Smith's work. They suggest that normally the blood does not contain ordinary dextrose, such as one obtains on dissolving powdered dextrose in water, which is really a mixture of two forms, *a* and *b* dextrose in equilibrium, but rather that the sugar in the blood is a specially reactive form of dextrose produced through insulin, and readily used by the body. Without insulin this reactive form is not produced, so that the blood only contains the *a* and *b* varieties, which cannot be metabolised. This theory is not, of course, incompatible with, but is rather an extension of, the picture of carbohydrate metabolism already given.

History of Insulin.

The islands of Langerhaus were discovered in 1867. In 1889 V. Mering and Minkowski excised the pancreas in animals and found that diabetes resulted. In 1908 Zülzer used intravenous injections made from pancreatic extracts for the treatment of five cases of severe diabetes. The sugar and acetone bodies disappeared from the urine for the time being. The injections, however, caused rigors, with fever and vomiting, and they did not come into general use. Dr. Beddard, in this hospital, also found that use of a pancreatic extract caused the sugar to disappear in the case of one patient. More recently several observers have found that the blood sugar was lowered in animals by means of similar extracts.

The whole question was very much "in the air" when Dr. Banting, of Toronto University, made his great discovery. He remembered that if the pancreatic duct of a dog is ligatured, after some weeks the acinar cells become degenerated, while the island cells remain intact. Dr. Best, who was at the time Prof. McLeod's demonstrator of physiology and unqualified, collaborated with him. Some weeks after tying the duct, the pancreas was removed and an extract injected intravenously into a depancreatised dog. The blood sugar fell from 0·26 to 0·16 per cent. in one hour, but rose to 0·25 after three hours. With the aid of repeated injections the dog was kept alive for ten weeks, while an untreated depancreatised dog does not live for more than three or four weeks as a rule. Extracts of fœtal pancreas were also used with success. Extracts of other organs were inactive.

After these experiments on animals, the extract was used in the case of a boy of 14 with severe diabetes, and the blood sugar was reduced by 25 per cent. Finally a method of preparing insulin from ordinary ox pancreas from the slaughter house by means of fractional precipitation with alcohol was carried out and this method with modifications is at present in general use. This work was published in March, 1922.

It is worth while reflecting that such a discovery by a young man carrying out his first research would have been almost impossible in this country owing to the stringency of our anti-vivisection laws, and in particular to the great difficulty such a worker would experience in obtaining a license for experimental work on dogs.

The Supply of Insulin.

The discovery of insulin was placed in the hands of Toronto University, and this institution, in order to prevent exploitation in its manufacture, patented the process and presented the British rights to the Medical Research Council. The latter body opened up negotiations for its commercial preparation in this country and at the same time they approached various hospitals who had the facilities and asked them to prepare insulin and to try it on specially selected patients. Private practice with insulin was debarred until the commercial supply became generally available. The reason for this cautious attitude was that in Canada and the United States such a large number of patients were being treated that the workers had all their time taken up in preparing insulin for their immediate needs, and there was no leisure to find out the cause of failure if any particular batch miscarried, or to try and effect an improvement in the process. Added to this, great difficulty was experienced in the preparation of insulin on a commercial scale, so that for many months the only supply of insulin was that made in the various laboratories.

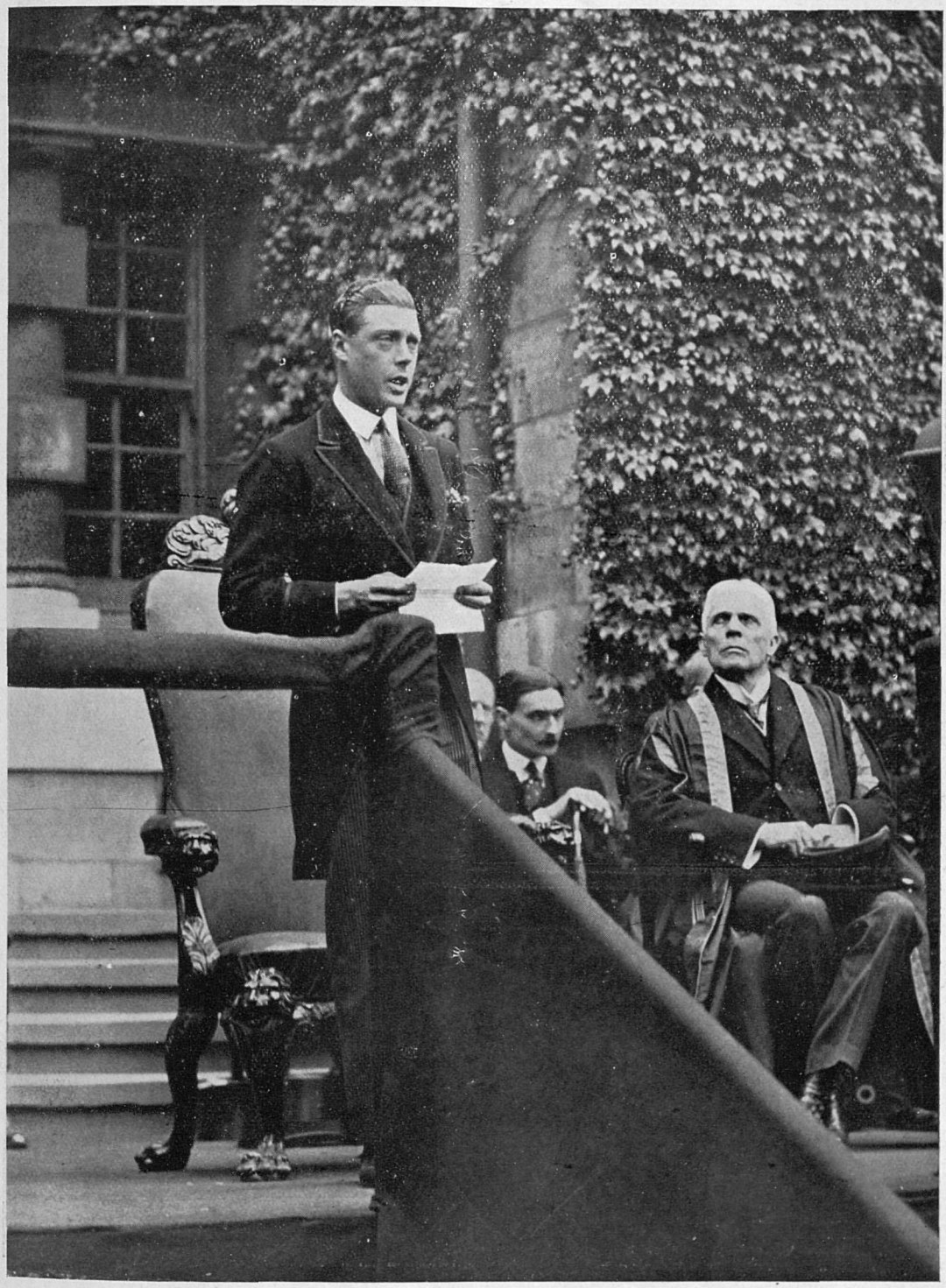
The action of the Medical Research Council has been criticised, but the ultimate result has certainly, in my opinion, justified their action. We have in this country at the present time a good supply, which comes partly from our own manufacturers and is partly imported from America, whereas I believe that there are no complete arrangements for its commercial manufacture on the Continent at present.

When supplies of insulin were first liberated for general use in this country the sale was regulated by a committee formed by the Ministry of Health, who stipulated (1) that it should only be used by those doctors who had the facilities for estimating the sugar in the blood; (2) that diet treatment should be carried out in the first place, so that it should only be used for those patients who could not tolerate a diet of more than 1,000 calories a day without passing sugar; (3) but that it should be freely used for all patients when coma was threatening. It was found that these regulations greatly restricted the use of insulin, so that after two or three weeks all restrictions were removed, and insulin is now available for any one to use.

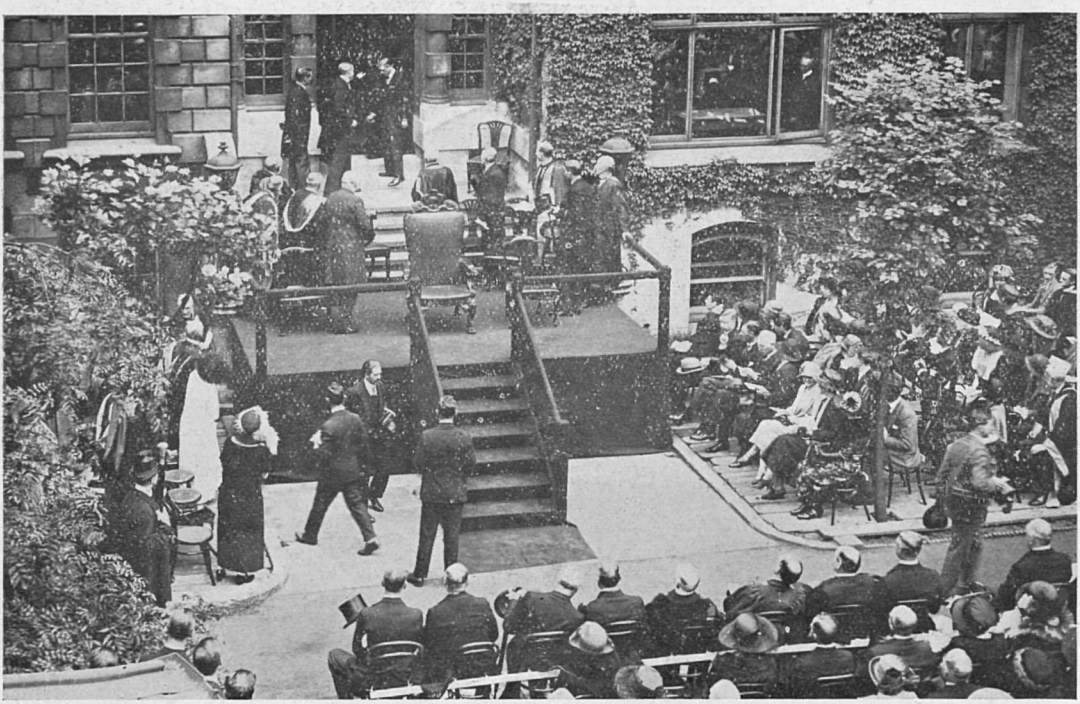
Results of Treatment.

The most dramatic results are those obtained with severe cases of diabetes. Here, for instance, is the case of a boy aged 9 years—

Opening of the Medical School Extension by H.R.H. The Prince of Wales, on Monday, July 2nd, 1923,



THE PRINCE DELIVERING HIS ADDRESS. *Photo by Keystone View Co.*

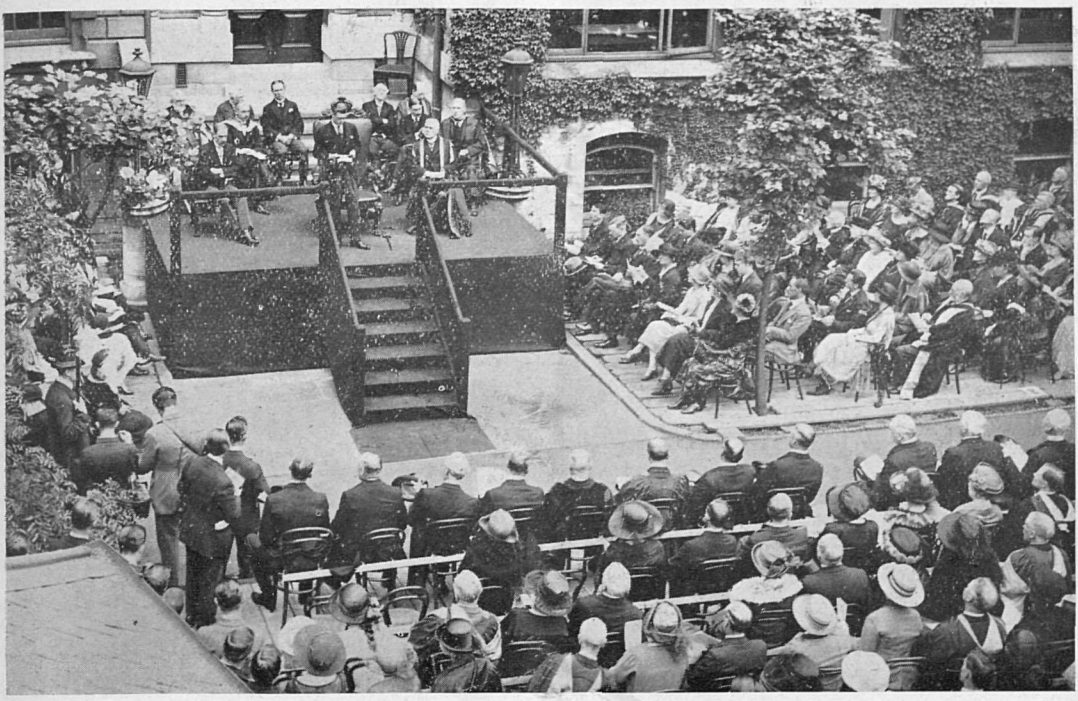


The Prince about to enter the Medical School.

Photo by London News Agency Photos, Ltd.

The Prince returning from the Opening Ceremony.

Photo by Daily Graphic.

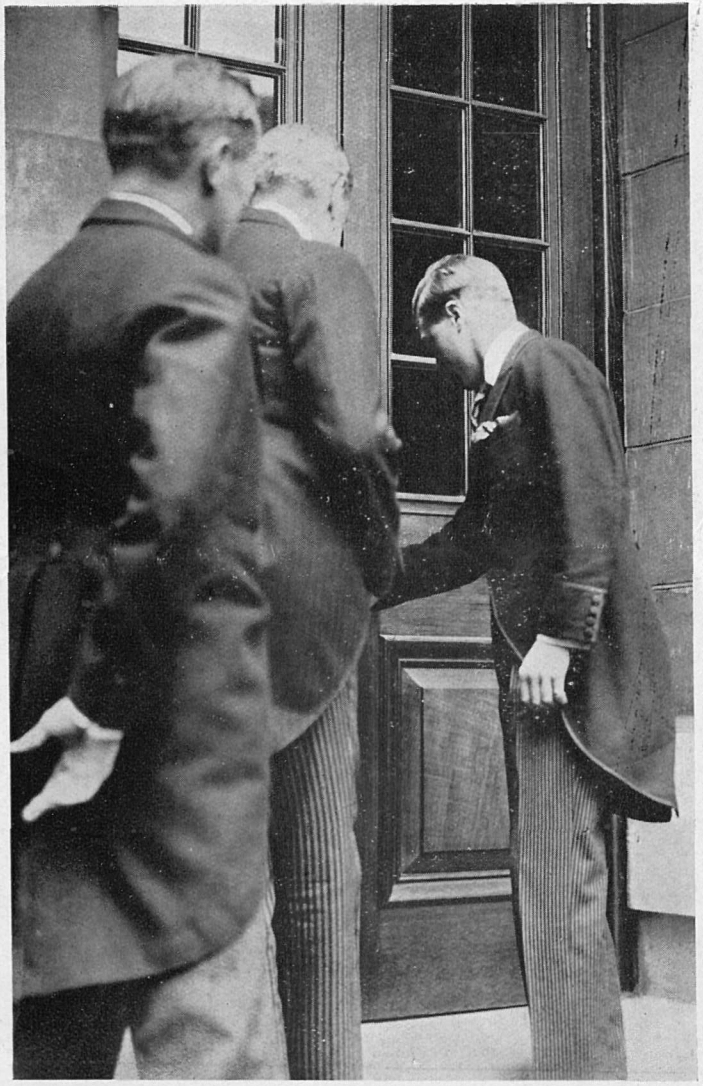


The Opening Ceremony.

Photo by London News Agency Photos, Ltd.

The Prince, accompanied by the Vice-Chancellor of the University and the Treasurer of the Hospital, on his way to the Medical School.

Photo by London News Agency Photos, Ltd.



The Prince opens the Door of the Medical School.

Photo by London News Agency Photos, Ltd.

The Prince returns from his Inspection of the New Buildings.

Photo by London News Agency Photos, Ltd.

The disease had begun acutely in January, 1922. At the beginning he had done moderately well with dietetic measures, including weekly fast days, and the urine had remained sugar free for certain periods, although he had been allowed some starch in his diet. Just before treatment the sugar had shown a rapid increase and there was much ketosis. The blood sugar was 0·35 per cent. Insulin, 10 units, was administered the next day at 6 p.m. In $3\frac{1}{2}$ hours the blood sugar was 0·11, but had risen to 0·4 24 hours later. The percentage of sugar in the urine fell from 4·6 to 0·4 in 6 hours. The alveolar CO_2 rose from 21 to 28 mm. in $3\frac{1}{2}$ hours as the result of the insulin. The urine collected for twelve hours before the insulin contained 10·1 gms. total ketone bodies reckoned as acetone, and that collected for twelve hours after only contained 1·6 gms.

So much for the immediate results of insulin in bad cases. The later results are no less remarkable. The urine remains free from sugar, the polyuria diminishes, septic complications such as boils clear up, the ketosis vanishes. The patient gains weight, and if emaciated fills out. The dry, rough character of the skin gives place to the normal smoothness. The hair regains its glossy appearance; the patients feel less tired. The mental powers improve and constipation vanishes.

In other words the patient loses the symptoms of diabetes while taking the drug.

Hypoglycæmia.

Another truly remarkable result of the investigations that have followed the discovery of insulin is the description of an entirely new syndrome due to hypoglycæmia, when excess of the drug has been given.

These are the symptoms of one of my patients, viz., a young man of about eighteen, whom I had previously treated on two occasions for diabetes by dietetic measures and whose disease was steadily progressing. On administering large doses of insulin, i.e., 60 units a day, and allowing him to fast as well, the symptoms came on, and at their height the blood sugar was found to be 0·095. This is not a low figure, but in cases where the blood sugar has remained high for a long time the symptoms come on with a fall in blood sugar, even though the level of the latter is normal or even above normal. He had profuse sweating, but he had noticed this particular symptom as soon as insulin treatment was begun, and it is due to some effect of the insulin and not due to hypoglycæmia. He was giddy and had a sinking feeling in the upper abdomen and felt hungry. His limbs were shaky; he had a headache and kept on sighing. The feelings came on in waves.

I have had occasion to see and treat a case of hypoglycæmic coma. This developed quite suddenly under energetic insulin treatment for diabetic coma, and there were no premonitory symptoms.

Perhaps the most striking symptom was the respiration, which was the absolute converse of the deep sighing respiration of diabetic coma. It consisted of a series of short, shallow, jerky inspirations. On handling the patient's limbs they showed slight convulsive movements. The state of the circulation was also in marked contrast to that in diabetic coma. In the latter condition the pulse becomes extremely feeble and the veins are collapsed. In hypoglycæmia the pulse is rapid and bounding, the veins are full and stand out prominently, the skin is hot and moist. The blood sugar was found by Mr. Payne to be 0·045 per cent.

Dextrose, given through a nasal tube, did not alter the condition, and so a vein was exposed and a 6 per cent. dextrose solution was allowed to run in. After she had received about 100 c.c., movements of the limbs were observed, several deep sighing respirations were taken, and within about half a minute her eyes were open and she was observing with interest what we were doing.

Other symptoms of hypoglycæmia, which I have not yet mentioned, are a sense of weak-

ness or fatigue, anxiety, nervousness, loss of emotional control, mental disturbances, deafness, difficulty in articulation and muttering delirium.

Methods of Administration.

Insulin must be administered by hypodermic injection. Its maximum effect in lowering the blood sugar is usually noticed in three or four hours' time. If the patient's condition improves with insulin treatment, we have sometimes noticed that insulin has a smaller effect in lowering the blood sugar and the fall occurs later. This would suggest that the sugar tolerance is diminished, but it may also be explained by the fact that the glycogen depots were empty at the beginning of the treatment and later became fully charged, so that there was not the same tendency for the blood sugar to disappear from the circulation under the influence of insulin as formerly.

On the other hand there seems no doubt that in certain cases the sugar tolerance has been improved by insulin, so that the patient can get on with less of the drug.

Rectal administration, which we tested in one case, is quite useless. A small amount of absorption may take place by the nasal mucous membrane, if insulin is sprayed in, and with Mr. Layton's help we found that absorption took place to some extent from the maxillary antrum. When given orally, insulin is useless, even when plenty of sodium bicarbonate is also given to prevent the action of pepsin in the stomach. One experiment of ours was strongly suggestive of the insulin being absorbed when given by the duodenal tube.

One point is clear, that subcutaneous injection is the only suitable method at present, especially as insulin is so expensive that it is important that no loss should occur during the administration, as would certainly happen if it was given by some other route.

It is also clear that, if it is to be of any practical use, the patients must learn to make the injections themselves. The cost of getting a doctor to make the injections twice, or even once, a day would make the treatment impracticable, except for the wealthy.

We have tried mixing insulin with gum before injection, to see whether its absorption would be delayed so that bigger doses could be given; but the delay was not very marked. Dr. Dale has had no success in mixing the dry insulin powder with olive oil, or liquid paraffin before injecting into rabbits.

Rules of Treatment.

There are many elderly people with mild diabetes who have always taken some bread without any harm apparently resulting. It is, however, probable that such people, if their blood sugar remains permanently raised, are more liable to complications, such as sepsis, cataract, etc., than if active treatment is adopted. By taking insulin such people will probably render themselves less liable to complications in the future.

In those cases of diabetes where active treatment is required, it is probably best definitely to exclude bread and other carbohydrates from the diet, except those contained in 5 per cent. vegetables. Insulin administered in order to allow the patient to take extra bread is a most expensive luxury at present.

In cases of very severe diabetes where the patient under ordinary circumstances would not have lived more than a few months, wonderful results may be obtained by giving insulin two or three times a day, and grading the dose so that the urine remains just free from sugar, or only contains a trace. Such treatment would be correct under the supposition that the islands of Langerhaus were so seriously injured that no regeneration was possible.

In earlier cases, or in mild cases, undoubtedly the correct treatment is to use insulin, so as to put the islands under the most favourable conditions to regenerate, and according to present views the essential condition is for the blood sugar to be low. At present this means that blood sugar estimations must be made. Mr. Payne and I have observed that our blood

sugar remains during the whole of the 24 hours between 0·09 and 0·11 per cent. if we are taking a rigid diabetic diet. Diabetic patients on such a diet, even if they are passing no sugar in the urine, may give values for the blood sugar which vary between 0·15 and 0·20 per cent. or even higher. Further, the maximum rise occurs in the early hours of the morning. This is surprising, but it is probably due to the metabolism of the exogenous proteins of the food, which takes place later than is the case with carbohydrate. To counteract this rise I give insulin just before the patient goes to bed. Another important time to give it is on getting up in the morning when there is a natural tendency for the blood sugar to fall after the rise of the early morning is over. By accentuating this fall, the attempt should be made to bring the blood sugar below 0·10, or even 0·08 per cent., so as to rest the islands fully. If the dose is gradually increased, I do not think there is any danger of hypoglycæmic coma; but premonitory symptoms of hypoglycæmia must be carefully watched for. In this treatment, the effect of the insulin can be reinforced by keeping the patient on a diet of low calorie value.

Insulin provides an extremely valuable means of treating diabetic coma. It should be given in large doses, say, 40 units, every four hours. It is essential to test every specimen of urine passed to see whether sugar is still present. When this disappears, the insulin treatment must be abated, or else hypoglycæmic coma may suddenly come on.

Other means of treating coma must be adopted. Two ounces of dextrose (or sugar) should be given by mouth at once and repeated with the insulin. Sodium bicarbonate in ½ oz. doses should be given by mouth or intravenously (2 per cent. solution) to facilitate the excretion of ketone bodies. Sterile normal saline should be given by a nasal tube at the rate of a pint an hour at least. The lungs should be watched in case œdema develops. Food, apart from dextrose, should not be given for 24 hours or more.

Hypoglycæmia may be treated by allowing the patient a little more food, or reducing the insulin. In more severe cases sugar, dextrose, or orange juice may be given by mouth, and in coma 6 per cent. dextrose should be given intravenously till the patient comes round.

Insulin may be given in doses of 20 or 40 units before a diabetic has an anæsthetic for a necessary operation.

Guy's Hospital.

The following appointments have been made by the Treasurer upon the recommendation of a Staff Meeting :—

Medical Registrars and Tutors.—Messrs. H. St. H. Vertue, J. J. Conybeare.

Medical Assistant.—Mr. A. A. Osman.

Surgical Registrars, Tutors and Assistants.—Messrs. C. H. Medlock, J. Gaymer Jones.

Obstetric and Gynæcological Registrars.—Messrs. A. J. McNair, F. Cook.

Chief Clinical Assistant and Registrar, Opthalmological Department.—Mr. O. Halstead.

Chief Clinical Assistant and Registrar, Throat and Ear Department.—Mr. N. E. Kendall.

Chief Clinical Assistant and Registrar, Orthopædic Department.—Mr. C. *Lambrinudi.*

Chief Clinical Assistant, Children's Diseases Department.—Mr. A. A. Osman.

Chief Clinical Assistant, Actinotherapeutic and Electrical Department.—Mr. J. F. Carter-Braine.

Resident Medical Officer, Bright Ward.—Mr. D. J. P. O'Meara.

Assistant Anæsthetists.—Messrs. A. T. Rogers, K. M. Woodruff, O. Halstead, N. E. Kendall.

Demonstrator of Anatomy (part time).—Mr. A. T. Rogers.

Demonstrator of Pharmacology (part time).—Mr. H. St. H. Vertue.

Demonstrator of Pathology (part time).—Mr. J. M. H. Lloyd.

Demonstrators of Chemistry (whole time).—Messrs. H. C. Bell, G. M. Bennett.

Demonstrator of Physics (whole time).—Mr. T. W. Adams.

Demonstrator of Biology (whole time).—Mr. L. C. Fox.

A Holiday in Normandy.

I do not know if it is the custom of the present generation of Guy's men to do as we used to do, to pair up, or make a small party, for the exploration of the Continent. Having acquired this habit in my student days, I have continued it during the last thirty years, so that I can write with some experience. Germany, in the present state of affairs, I will leave alone, and passing Holland and Belgium as small and simple as regards touring, I will pass my remarks on France and Normandy in particular.

I always now travel first class, but never dreamed of doing so thirty years ago, when money was, to my way of thinking then, better spent in having a good time when one arrived.

Personally I prefer the Newhaven-Dieppe route day service, but would add as a warning that if Rouen is the first objective, on no account travel by night, as there is a three hours' wait at Dieppe. On choosing France for a holiday remember that "the season" begins on July 1st and closes on the 16th September, that only during this period the casinos are open (Dieppe excepted) and that excursions, etc., in the smaller places are off, except in "the season." The advantage, however, is things are cheaper, hotels charging 28 francs a day instead of 35.

You may travel far in France before you strike a better town for a holiday than Dieppe. Its season is earlier, the town clean and hygienic, and the country round some of the best in Normandy. The Hôtel Soleil d'Or is a comfortable old-world place of the inn type. Baedeker remarks on the excellence of the wines—and they are good. Hôtel des Indes is comfortable and near the quay. The Hôtel du Commerce, one of the old galleried hotels, does you well both as regards food and attention. On the plage I can recommend the Hôtel des Etrangers, but it is rather more expensive than those I have mentioned. A déjeuner at the old inn at St. Martin, after a visit to Chateau D'Arc, is a pleasant and lingering memory. It is a fine old place with a wonderful kitchen and a beautiful garden, where one eats the trout from the stream that runs through the grounds.

Veules les Roses (16 miles from Dieppe) I consider to be the most delightful spot I have struck in France. It faces due north and is situated in a valley cut by a beautiful, clear stream. The place is exceedingly picturesque, and is frequented by better-class Parisiens. The Grand Hôtel des Bains is excellent in every respect, and the proprietors, Monsieur and Madame Lamy-Hellouin, are really dear people, kindly and generous. The hotel has a pleasant garden through which runs the little river. Veules is an excellent centre for walking or cycling and there is tennis on hard courts. The hotel will arrange to meet the boat with a motor car, which saves a long and inconvenient train journey.

Sotteville-sur-mer is about a mile and a half from Veules. The hotel, or village inn, is kept by a dear old lady, and has excellent rooms; it is very bright and clean. Sotteville is only a primitive village, but the farms and cottages are charming and ideal for the artist. It would be a good spot for a "reading party," but duller than Veules, as there is no life and no casino.

St. Valerey-en-Caux is a small fishing town, very clean and pleasantly situated, five miles west of Veules. The Casino is open in the season. The Hôtel de la Plage et du Casino is good and comfortable. It is kept by a charming young couple. In the days when we were not so friendly to the French we landed a round shot into the hotel, and there it remains sticking out of the front wall.

Fécamp, noted for its Benedictine (which is not made by monks) in an interesting old town, a seaport and fishing place. It straggles up a valley and has factories of a sort, fish-curing establishments and a small shipyard. The Hôtel d'Angleterre on the beach is quite good, and I remember that the burgundy was

particularly excellent. A walk of about 10 miles westward brings one to Etretat, quite a beauty spot, but marred, I think, of recent years by pretentious hotels and "swank." It is quite a small place.

Havre is a big, noisy town, but is a good centre for excursions. I visited it by steamer down the Seine from Rouen. There are steamer trips to Caen, Honfleur, Deauville, Trouville, and other places. The Hôtel Modern is first class and very reasonable. I should advise those wishing to behold the fashion and life at Deauville and Trouville to stop at Havre, as the former are expensive, and to my way of thinking a little of them goes a long way.

So far for my remarks on the Normandy coast, I only would add that most of the places are now charging 28 francs out of and 35 francs in the season. Most of them are booked up till the end of August, so it would be necessary to enquire before going. The inclusive charge per day allows cyder of a thin sort (but how good was Madame Lamy's!). "Mousseu," in big bottles at 3 francs is most delicious. The wines, as throughout France, are good and inexpensive.

Before leaving Normandy let me urge everyone to visit Rouen. I have put in a week there on five different occasions, and could return again with pleasure. The scenery round is superb and full of interest, while the town and buildings seem inexhaustible, as one can enjoy them again and again. I always stop at an old Louis Quatorze hotel, The Grand Hôtel de France. It is purely French, thoroughly excellent, and possesses a dear old waiter, who would give any young Englishman paternal attention.

I know my Brittany less well than I do my Normandy, as I have confined my holidays to the Dinard District. I hit upon a most excellent pension at St. Servan, La Maison Matthias, but I do not know if it is still running. They had French classes at the college at St. Servan for English people during the vacation. St. Malo, a compact, walled town, is interesting, but rather stuffy to stop in. Dinard is pleasant, not too fashionable, and the bathing excellent. There is a good and reasonable hotel at St. Enougat, two miles away, finely situated on high cliffs, called Hôtel de la Mere. Dinan up the Rance, is a charming old walled town, likely to be hot and stuffy in summer. The Hôtel de la Poste, pleasantly situated on the town wall, is comfortable, and the food particularly good.

So I will end my remarks, hoping that these hints may be useful to others. To those who would go farther afield I would remind them that a steamer takes one in comfort from the Thames to Bordeaux (General Steam Navigation Co.), and that the Alpine Sports, Ltd., arrange tours for the chateaux of the Loire. The only other way to do the Loire is by cycle or motor car, as the communications are so inconvenient.

A. P. A.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Fallacy in the Modern Treatment of Secondary Syphilis.

SIR,—With your permission I will make a short reply to Dr. P. C. P. Ingram's letter to Guy's Hospital GAZETTE of 7th inst. The symptoms of syphilis are not caused directly by the spirochæta pallida, but only by the products of the action of the spirochætæ upon the tissues. The stage of secondary syphilis comes to an end without treatment, and is retarded by the modern treatment of giving mercury for a prolonged period such as two years. Hutchinson says: "The cases in which syphilis is transmissible by inheritance for more than a year or two after its secondary stage appear to be very exceptional." This has ceased to be true as the modern prolonged use of mercury causes the stage of secondary syphilis to be greatly prolonged and obscured.

If the secondaries are not severe, local treatment is all that is necessary, but *if severe*, mercury or salvarsan must be used to obtain the removal of the products of the action of the spirochætæ upon the tissues. It is quite certain that

both these drugs have great power in removing these syphilitic lesions, but it is "not proven" that the spirochætæ are killed, for they may probably only be driven from the blood into the tissues, where they may remain twenty years or more before emerging and causing tertiaries.

If the modern treatment of syphilis kills the spirochætæ no more cases of locomotor ataxy or general paralysis of the insane should occur. Have they ceased to appear after this intensive treatment? Control experiments should be made—some cases of secondaries should be treated in the way recommended by Hutchinson and Bristowe, and the time of the disappearance of the spirochætæ from the blood and the time when the Wasserman reaction of the blood becomes negative, should be noted and compared with cases which have undergone the modern intensive treatment.

ROBERT S. WAINEWRIGHT.

DEAR SIR,—I have been informed that my son Denis has been successful in obtaining a Foundation Scholarship for Epsom College. Would you please be good enough to express my sincere gratitude for the Guy's support, which I feel sure has largely helped to secure his election.—With grateful thanks, I am, yours sincerely,

DORIS SANFORD.

10, Ashlong Road,
Addiscombe,
July 12th, 1923.

"Glossology"—A Forgotten Page of Medical History.

By A. G. MILLOTT SEVERN, B.A.(Cantab.), M.D.(Brux.)

Whilst turning over the dusty contents of the "twopenny box" of an old bookseller the other day, a small volume with the odd title "Glossology" caught my eye. This I was surprised and interested to discover was a scarce treatise, written by an old Guy's man, not dealing with the study of languages as the title might suggest, but describing "An Additional Means of Diagnosis of Disease, to be Derived from Indications and Appearances of the Tongue." It contained the substance of a paper read before the "Senior Physical Society" of Guy's Hospital, in 1843, by Dr. Benjamin Ridge, M.D., M.R.C.S.

The book describes in some detail the curious, and rather Utopian doctrine, of the diagnosis of a large variety of diseases from observation of the tongue, according to a system discovered by Dr. Ridge himself.

The modern practitioner places some reliance on the appearance of the tongue as an aid to diagnosis, but this old-time medico goes very much further than any of us would care to do to-day.

The tongue is elaborately mapped out by the doctor, in accordance with his tabulated mathematical measurements, into a number of areas relating to different parts of the body; for example, the tip of the tongue is devoted to the large intestine, a part of the sides to the kidneys, the edges of the tongue to the brain, the central part to the pleura, and so on. Most of the organs, including the pharynx, oesophagus, stomach, duodenum, liver, spleen and pancreas, are allotted their location in the tongue; but he states:—

"One circumstance has troubled me in my researches—that I have not been able to find a place on the tongue for diseases of the uterus or the male genitals. Considering the vast amount of disease of the female, in which the uterus plays a prominent part, there must, I am sure, be some reason why this has escaped me, though I believe that organ to be affected very much through the imperfect or morbid action of the other organs."

The different appearances recorded by Dr. Ridge are apparently variations in the type and distribution of furring of the tongue; slight alterations in its general size and shape, and patches of redness or inflammation of the villi and papillæ; differing, so he says, in each disease. One variety of furring to which he attaches a good deal of importance he distinguishes by the name of "Limaceous," from its resemblance to a species of snail.

The author claims:—"To my mind, the papillæ are of equal value to the pulse in the diagnosis of disease."

He says in the Preface to his work:—

"One thing always struck me as curious—that the tongue should be looked at for information on the state of the system, and, when seen, little or no information can be derived from it. If it gave information not to be relied upon, where was the use of looking at

it? Who commenced the practice of looking at the tongue as an indicator of disease? and why have not the followers of that practice reduced its appearance to a system."

Further on in the treatise one reads:—

"In a congested state of the coverings of the brain, we find the rugæ pale, and the edges of the tongue flabby. In a fevered or inflammatory state, the rugæ are distinct, but the edges glary, and even fiery red. . . "

"In congested states of the primæ viæ, the tongue cleans as the corresponding surfaces of the passages clean. If this has been effected by proper medicines, and the morbid humours carried out of the body, both indicate health; but if nature has removed them into the blood, they are then filtered through the skin in the form of pustules, or ichorous eruptions."

His motto was:—"Nulla sine causa nota." At any rate he was prompted by the true spirit of scientific enquiry one might expect in a Guy's man, and was a lover of Truth for its own sake, as the following shows:—

"It is said—and to our shame it is said—that the art of medicine has not progressed in the same ratio as other arts and sciences of less vital value and importance. The art of medicine, as it affects the well-being of the community at large, should hold a high place and dignified position in human affairs; but never, unfortunately, was charlatanism more rampant than in this day, both at home and abroad. For myself, I would willingly hold any doctrine, and follow it out, which promises to benefit my fellow-creatures, if it be founded on truth, and upheld by philosophy; but where this is not the case, I will not be guided by the general clamour in its favour, but will follow after truth in my own way. . . "

"I will, therefore, lay before you the divisions I have adopted, without straining any point to meet theoretical views, and without servile speculation to bring Nature to succumb to hypothesis."

He is in a cynical mood where he states:—

"When the tongue is silent it will tell the truth."

Another paragraph worth quotation would apply equally well to-day:—

"Students are apt to imagine that research is exhausted, and that everything is known that can be known—that the zeal and industry of man has fathomed everything. How clear appear the arguments of the professors; how sound their doctrines; how skilful their treatment! Yet no age is spared by the destroying hand of Death!"

Dr. Ridge anticipates modern views regarding the effect of strong emotions on the hormone balance when he states:—

"Fear will change the chemical character of the blood as suddenly as it will be gradually restored in the course of circulation; and this altered state of the blood will irritate the heart, or it will be irritated through the nerves from the sensorium, which has first felt the change in the nourishing fluid."

It is interesting to note that he claims to tell at once, in many cases of illness, by means of his system, whether the disease is in progress or whether it is on the decline.

There is a suggestion of J. M. Barrie in this paragraph where the doctor says:—

"Our elders may boast their experience, but science is advanced by the vigour of middle life, and nourished and upheld by the glowing warmth and ardour of youth."

Our author shows himself to be somewhat of a philosopher in stating:—

"Important truths are only to be elicited by a great expenditure of time and patience."

"Whatever, therefore, aids the powers of diagnosis, aids the good the physician aspires to do. . . In skilful hands, time saved in discovering disease, saves suffering, and even life: whilst time lost in diagnosis of disease is never regained. . ."

"Whilst I have been pursuing this research I have also been endeavouring to find out the laws of Nature, so as to assist, and not oppose her."

Few will dispute his dictum that:—"Disease is Nature's effort to cure."

The over-burdened medical student of our day has little time for research in the history of the healing art, but a perusal of this curious old volume, dating from the days of Astley Cooper, takes us back to the time when much that is now common knowledge was obscure, and serves to remind us from how many strange and devious bye-ways the modern Science of Medicine has emerged.

Water Polo Chats.

THE HALF-BACK.

The Half-Back is the pivot of the whole game: in defence, he acts as a full back, closely marking his opposing centre forward, but always keeping as far upfield as possible, ready to support his forwards; the distance upfield at which the Half-Back normally lies, varies directly as the efficiency of his own goal-keeper, and inversely as the shooting capabilities of his opposing forwards. He is continually on the move, closely watching his man, yet ready to seize any opportunity for either shooting himself, or breaking away with the ball, drawing an opposing back, and passing to his then unmarked forward. Occasionally, while waiting downfield, a long pass will be sent down to his opposing centre forward: he will then find it best to "smack" the ball, with open fist, away from his man, either to one of his own forwards, or to a clear patch to which he can swim himself, while giving his man the benefit of his feet. Space will not permit of more on Half-Back play; indeed, a comprehensive work on this position would fill several bulky volumes.

CENTRE FORWARD.

Like that of every other position in Water Polo, the Centre Forward's game may be of two kinds: (1) When his man is afraid to leave him, so that he can govern his own place in the pitch, i.e., keep well upfield, and (2) when his particular opponent ignores him, and keeps well downfield. In the first instance, he may wander where he will, with the certain knowledge that his man will not be far away, and so can play his own game: but, in the second instance, he is doomed to hang around very close to the shooting aim of his opponent. He must know many tricks of the trade, such as turning rapidly on his man, so that that gentleman has a good view of and—let it be whispered!—a gentle (?) tap from a pair of flying feet: he must be able to shoot rapidly and accurately from any position: very rarely will he have time to take careful aim with a "sling-shot": very often will he, while closely marked, be faced with an open goal, and the problem of netting the ball with one "flick" before he sinks. Experience and experience alone will teach him how best to shoot from difficult positions, and to worry his particular opponent by the judicious use of turns, and his feet.

Lawn Tennis.

2nd ROUND SENIOR INTER-HOSPITAL CUP.

The second round of the Senior Inter-Hospital Cup was played at Honor Oak Park on June 13th, v. Middlesex Hospital, and resulted in Guy's winning eleven matches and Middlesex 1.

Singles.

Nurick beat Jeremiah, 6—1, 6—2.
Jackson beat Williams, 6—3, 6—0.
Lewis-Philipps beat Cooldwater, 6—3, 6—1.
Neser lost to Van Geyzel, 3—6, 5—7.
Sharpley beat Wilson, 6—0, 6—2.
Schlimmer beat Panchridge, 6—1, 6—1.

Doubles.

Jackson and Neser—
Beat Van Geyzel and Jeremiah, 4—6, 6—1, 6—2.
Beat Cooldwater and Williams, 6—2, 6—4.

Nurick and Lewis-Philipps—
Beat Cooldwater and Williams, 6—2, 6—2.
Beat Wilson and Panchridge, 6—3, 6—2.

Schlimmer and Sharpley—
Beat Van Geyzel and Jeremiah, 7—5, 6—3.
Beat Wilson and Panchridge, 6—2, 6—3.

Births.

FAWKES.—On July 7th, at Leicester, to Gertrude (née Jenkins), wife of Herbert Beattie Fawkes, a daughter.

KIDMAN.—On July 5th, at 134, Osmaston Road, Derby, to Marjorie, the wife of George Kidman, M.B., a daughter.

Marriage.

STAINER—HEWES.—On July 9th, at St. Mary's, Hayling, by the Rev. G. Clark, Courtenay B. Stainer, of Southsea, to Mabel E. Hewes, of Hayling.

Deaths

MURIEL.—On July 3rd, 1923, at Glenfield, Whitehaven, in his 81st year, George John Muriel, J.P., M.R.C.S.Eng., youngest son of the late John Muriel, Esq., F.R.C.S., J.P., D.L., of The Chantry House, Ely, Cambridgeshire.

SANER.—On the 13th, June, 1923, Mr. J. G. Saner, at Johannesburg.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

DWELLERS in the College will hear with great regret that Dr. Ryle is soon to leave Maze Pond, having completed his term of office as Warden. In spite of the fact that his new abode will probably be in a much healthier neighbourhood than this, there will be one drawback—the loss of the Park's friendly propinquity.

His successor, Dr. Conybeare, has been associated with College affairs for so long that it is but the briefest of steps to the Warden's House, spiritually as well as corporeally. We offer him a hearty welcome.

AND now the Nigger responsible for the query and answer: "Why is the Warden's House like Buckingham Palace? Because the Ryle Family lives there." will have to look for a new joke before Christmas.

NOT only those exalted individuals who possess cars (or can afford taxis to the College gates), but even the mere pedestrian must have heaved a sigh of relief at the disappearance of the trenches and scaffolding in Maze Pond and St. Thomas's Street.

Now we can catch our bus, or buy our paper, or hasten to our rendezvous without the galling necessity of an obstacle race as part of the proceeding.

But it will be a loss to the small boy who counts on the delay as an asset to him in his pursuit of cigarette pictures.

THE Athletic Sports which were held at Honor Oak Park on Saturday, July 28th, in aid of City Hospitals, were successful in spite of the weather.

The Hospitals, Banks, and Insurance Companies were competing. Steyn followed his usual custom and won the 100 yards and the long jump for the Hospitals; Hutchinson was successful in putting the shot, while Stallard, of St. Bartholomew's, won the mile, and Lightwood (King's) won the quarter mile and secured the second place in the mile. L. G. Housden ran third in the three miles race.

In spite of these Hospital successes, the Banks emerged victorious, defeating the Hospitals by 11 points.

There were no prizes for winners, the honour of obtaining points for their side being regarded as reward enough.

We hope to see a repetition of this attractive gathering next year.

ATTEMPTS are being made to arrange a cricket match between past and present Guy's men. Although nothing is as yet definitely fixed, the match will probably take place either Wednesday the 22nd, or on Wednesday the 29th of August.

Further details will be announced when the arrangements have been completed.

THE Hospital has been deprived, by the death of Sir Shirley Murphy, which took place at his home at Regent's Park on April 27th, of a most distinguished son. An indefatigable worker, he had devoted himself during the last forty years to the study of hygiene and

epidemiology, and his work as a Public Health Officer has been rewarded not only in the increased health of the areas under his jurisdiction, but also in the dissemination of knowledge through the medium of books, and of discussion. He was secretary of the Epidemiological Society, a post which he held from 1876 to 1888, and of the Society of Medical Officers of Health, a position which he accepted in 1879.

Sir Shirley Murphy was a student at Guy's before 1866, and qualified in 1870.

Ill-health forced him to go abroad before the completion of a hospital appointment at Manchester, but upon his return he was appointed an Assistant Medical Officer at the Metropolitan Asylums Board at Homerton, after which he became Resident Medical Officer at the London Fever Hospital. He was the first Medical Officer appointed by the London County Council, and held this post for 22 years.

He retired in 1911, but resumed active work in 1914 when the war broke out, working as a Specialist Sanitary Officer. He was a Lt.-Col R.A.M.C on the Territorial List. These duties he continued to perform until some time after the armistice. Appreciation of his services to his country and to the science of epidemiology was marked by the conferment of a knighthood in 1904, and since that time by various other distinctions, not the least of which was the receipt of the Jenner Medal of the Royal Society of Medicine in 1921. The completion of a life of consistent service brings before us a record of which Guy's men may well be proud and an example which they would do well to follow.

THE sad death at Johannesburg of Mr. J. G. Saner will be felt as a great loss by those who knew him at Guy's. After a successful career at Cambridge and Guy's he joined the R.A.M.C. at the beginning of the war, and served in France until his health broke down. Subsequently he practised as a surgeon in Johannesburg, where his skill soon established his position as one of the most brilliant of the younger surgeons there. About a year ago he had a serious breakdown and was obliged to take a prolonged rest.

Although he was never robust, his real ability as a scrum half will be remembered by many of his contemporaries.

None of his friends will forget the great personal charm which was so marked a characteristic of the man.

We hope to publish a more detailed obituary notice in our next issue.

WE offer our heartiest congratulations to Dr T. G. D. Bonar, who was successful at the recent examination for the M.D.Lond. in Midwifery and Diseases of Women, and to Dr. Gordon Cavell, who has obtained the M.D. Lond. in Tropical Medicine.

WE are asked to remind those who have put down their names for the Course in Fevers, which is to be given at the Park Hospital, that the Course begins on August 8th, and that the hour of attendance is 11 a.m. on Wednesdays and Fridays.

THE Editor wishes to express his regret that the notes published in our last issue, under the heading "Final Fellowship Course, Notes on First Test Paper," were inadvertently allowed to appear without the consent of the Author.

Specialities.

THE "SINDIX" ALL METAL HAIR BRUSH.

The "Sindix" is an almost everlasting hair brush. The back is highly finished aluminium, with tufts of finely-drawn, non-rusting wire in substitution for the ordinary bristles. The back of this brush is perforated, thus allowing it to be easily cleaned, and should therefore, prove most valuable to Medical Men.

The "Sindix" Hair Brush is obtainable in three strengths—soft, medium and hard—and sold at 12s. 6d. each by most dealers, or direct from the makers, Sindix, Limited, 5, John Street, Adelphi, W.C.2.

Tick Paralysis.

By Brev. Lieut.-Colonel W. P. MacArthur, R.A.M.C.

Recently Dr. Herbert French received from Dr. A. C. Nash, British Columbia, a very interesting account of several cases of paralysis attributed to tick bites. He also sent several specimens of ticks, stating that "the cases seem to be traceable to the bites of these." The ticks were forwarded to the Royal Army Medical College for identification where they were found to be *Dermacentor venustus* Banks, 6 gorged ♀ ♀ and 1 ♂. As is well-known this is the species also incriminated in the spread of Spotted Fever of the Rocky Mountains.

Dr. French suggests that parts of Dr. Nash's informative communication should be published, together with some account of the interesting condition known as tick paralysis.

Dr. Nash says, "These wood-ticks live on the sage brush with which all our uncultivated lands are covered. . . . Sheep and dogs are stated to be paralysed and frequently killed by them. . . . With regard to attacking human beings, they get on the clothes or body of anyone in or near the sage brush and usually work their way to the head or neck, often being found actually in amongst the hairs of the scalp with 'nose' buried deep in the scalp, or else on the nape of the neck.

"An essential oil or a hot needle applied to the 'insect' is said to make him loosen his hold, but if deeply embedded nothing short of cutting him out is of any use; for, should he be pulled off and the 'head' left in the wound, a sore spot will be left which may take many months to heal. I prefer to raise the skin into a tent by slight traction and to snip with the scissors clear of the 'head.'

"The bite of these 'insects' is never felt, and the question has been raised whether their poison has an anæsthetic action. The tickling of the legs often warns a person that one is on him, but so far I have been unable to find anyone who has felt the actual bite. The site chosen by the 'insect' is of course thick and poorly innervated skin, which might partly account for this.

"I was called to see a child last summer who died in less than forty-eight hours, and after death two wood-ticks were found on the back of the head . I did not see the child alive, but understand that she complained of thirst and increasing difficulty in breathing. I did not make a post-mortem.

"Another child died at Clinton suddenly a few years ago and after death a wood-tick was found just after it had released its hold. The bite was in the hollow of the neck and just below the back of the head.

"Last year a child, six miles from here, was getting drowsy and paralysed and the parents started to bring the child to me. On their way they found a wood-tick on the child's neck and after its removal the child rapidly recovered.

"A man was in hospital in a small town near here suffering from paralysis of the legs from no apparent cause. The matron eventually found a wood-tick embedded in the skin of one groin, and after its removal the patient rapidly recovered.

"These facts sufficiently indicate the dangerous nature of the bites of these 'insects,' especially on children and anywhere round the head and neck. . . . At present we are completely in the dark, and unless the cause of the drowsiness is found sufficiently early the little patients seem to die."

Dr. Nash does not say definitely if any of the ticks sent were removed from the paralysed cases. Even if they were not, it is highly suggestive that *D. venustus* is found commonly in the locality where these cases occurred.

The first cases of Tick Paralysis recorded from Canada appear to be those collected by Todd,[1] of McGill University. During an enquiry regarding the possible occurrence of spotted fever in British Columbia, he circularised practitioners asking for an account of any cases of disease attributed to tick bites. Several cases of paralysis were reported, some of which had proved fatal. Paresis and paralysis of the legs were the most constant symptoms. In most instances the ticks were found near the nape of the neck. In some, the symptoms ended in death due to involvement of the respiratory muscles; in others, after removal of the ticks complete recovery followed in a few days. One doctor reported an interesting series. The first case died suddenly with symptoms of acute ascending paralysis. After death a large tick was found

at the nape of the neck. A second child with the same symptoms died after an illness of two days. A tick was found attached to the right temple. This experience suggested the presence of a tick when a third child was seen suffering from an ascending paralysis of two days' duration. One was found at the nape of the neck; it was removed and in two days the child was quite well again. Later a little girl became ill with complete paralysis of the lower limbs and marked paresis of the arms. Three ticks were removed from the neck and the child recovered completely. It does not appear that the species of tick implicated in these records was determined. Seemingly they were assumed to be *D. venustus*, as this species is common in the districts affected.

Hadwen[2] reported a similar disease affecting sheep in British Columbia. From 1910—13 he had received complaints from a sheep farmer regarding a form of paralysis occurring in his flocks. Hadwen thought that the disease might be the same as that reported by Todd, and on investigation he found that the sheep were infested with *D. venustus*. He produced the disease experimentally in lambs by allowing these ticks to feed on them. Paralysis occurred six to seven days after the ticks were put on. He points out that only the adults of *D. venustus* attack man and the larger animals. The females take four to ten days to feed and drop off. If the ticks are removed early no pathogenic affects follow the bite.

Hadwen suggests that the paralysis may be due to toxins formed in largest amount when gorging is most active, i.e., about 24 hours before the ticks drop off. He failed to transmit the disease by inoculating blood, emulsions of blood, spinal cord, and crushed ticks which had caused paralysis. All cultures were negative. The only pathological lesions found in the animals were hæmorrhages at the site of the bite, and congestion of the brain and cord.

Hadwen's experimental results were confirmed by Nuttall[3] in Cambridge. One *D. venustus* ♀ sent from Canada was allowed to gorge on a dog which developed paralysis of both legs and incontinence of urine, the symptoms appearing on the ninth day of attachment. The animal made a complete recovery. Nothing abnormal could be found in its blood.

In the Western United States paralysis in man associated with tick bites was noted by McCornack[4] as early as 1903. He has published 13 cases with the same symptomology as that mentioned above. In one of these the tick responsible is described as "resembling" *D. venustus*. Removed alive, it "attached itself to a guinea pig and on the sixth day moderate fever and decreased capacity to use the hind legs were observed." Seemingly in the remainder of the cases no identification of the ticks was attempted.

Temple recorded 13 cases of Tick Paralysis in Oregon. I have not seen the original publication, but Nutttall[5] quotes it extensively, and the same cases are also mentioned by Bishopp and King.[6] One of Temple's series shows how readily a tick may be overlooked. Symptoms described to him by telephone seemed so suggestive of Tick Paralysis that he advised the patient's mother to look for a tick. She informed him later that no tick could be found. He visited the child, who was paralysed and unable to stand, and after a careful search he discovered a tick hidden in the hair. The tick was removed and the child made a rapid recovery. Temple notes, "there is a great variety of ticks infesting our western slope." Three specimens sent by him for identification—but apparently not collected from any of his cases—proved to be *D. albipictus*, *D. venustus* and *Ornithodorus megnini* respectively. It is significant that the one species definitely incriminated in Tick Paralysis occurs in Temple's locality.

Cleland[7] in Australia quotes two cases of Tick Paralysis, one fatal in two days with involvement of the legs and respiratory muscles. "The tick was almost certainly *Ixodes holocyclus*." In the other, there was muscular weakness and amblyopia. The species of tick responsible is not mentioned. He summarises observations on about a hundred cases of paralysis in dogs.

A detailed description is given by Eaton[8] of Tick Paralysis with fever, delirium and diarrhœa in a child in Brisbane. The involvement of the limbs resembled that observed in the American cases, but in addition there was ptosis and paralysis of accommodation. The tick had been removed before Eaton examined the patient, but from a relative's description he thought it was an *Ixodes* of doubtful species. This is obviously an unsatisfactory method of

indentification, though the only one possible under the circumstances.

Strickland[9] quotes another case of apparent Tick Paralysis in Australia as described by the patient's mother. The boy complained first of feeling sick and giddy, and was supposed to have a "bilious attack." Three days later, "all his muscles seemed to be affected, he could not walk without assistance, and his face was quite crooked on one side." A tick, discovered by chance, was removed from the ear and within ten days the boy had completely recovered. Unfortunately the tick was not kept for identification.

In Cape Colony sheep paralysis is attributed to *Ixodes pilosus,* and measures directed against these ticks are reported to prevent the disease. So far as I know, there are no African records of Tick Paralysis in man, though Sant' Anna,[10] Nuttall,[11] and others have reported instances of tick bite causing fever, malaise and enlarged glands. The ticks inculpated were species of *Amblyomma, Rhipicephalus,* and *Boophilus.*

Various biting arthropods may cause somewhat similar, though usually milder, symptoms in susceptible persons. The writer had an interesting demonstration of varying degrees of individual susceptibility to the bite of the same species of arthropod when engaged in rearing *Cimex lectularius*—the European bedbug—some time ago. He shared the feeding of these insects with two laboratory attendants, both men of a good class who denied any previous personal acquaintance with bugs. One of them was not troubled by the bites either at the time of feeding or afterwards. The second developed an urticarial patch at the site of the punctures, but within a day all inflammation had subsided. The writer felt little effect from the bites for about 24 hours, when a severe reaction occurred with much swelling, reaching a maximum about 48 hours after the bite. If several *Cimex* had been fed simultaneously, the arm became œdematous from the fingers to the shoulder, the axillary glands became enlarged and tender, and there was some fever. Attempts to produce an immunity by feeding at intervals failed, and no perceptible diminution in the reaction occurred within several months. Finally the feeding of *Cimex* had to be left to others better endowed for the performance of this base, mechanic exercise.

General constitutional disturbance with fever, aching pains, etc., may be caused in non-immune persons who became rapidly and heavily infested with *Pediculus humanus corporis.* The symptoms disappearing when the individual is efficiently loused. Such reactions have been produced experimentally by Moore[12] and Hirschfelder.[13] The writer has seen several cases where similar effects appeared to be attributable to an unaccustomed infestation with a swarm of fleas; in one instance a second exposure was followed by a recurrence of the symptoms. Some such reaction may possibly have been noticed popularly in the Middle Ages, for when Chaucer's Cook of Londoun is discovered in a lamentable state of prostration—later to be lifted with "greet showvying" and "muchel care and wo"—the good natured Host suggests infestation with fleas* as one of the alternatives to the obviously correct diagnosis of acute alcoholism!

Such symptoms as may follow insect bites under certain conditions resemble generally the effects noted in the African cases of tick bite mentioned above, except for the usually more severe nature of the latter. Turner, cited by Nuttall,[11] records that five men with fever, dirty tongue, and enlarged glands due to tick bites were quarantined at an African port as suspected plague. This greater constitutional and local disturbance may be due to the Ixodine Tick's lengthy period of feeding and possibly also to the formidable mouth armature of ticks as compared with that of most biting insects. This "Tick Bite Fever" although a very interesting condition has no connection with Tick Paralysis.

Summary and Conclusion.

Tick Paralysis is a definite morbid entity. Under certain undetermined conditions it can be induced by the bite of, at least, *D. venustus* as has been established by Hadwen and Nuttall. The reported cases of Tick Paralysis occurring beyond the range of *D. venustus* appear very suggestive, but experimental evidence definitely inculpating the ticks is lacking.

The symptoms noted are those of an acute, flaccid ascending motor paralysis, without sensory changes. Usually commencing in the legs, the paralysis in severe cases also involves the muscles of the trunk, arms, head and neck.

*"Hastow had fleen al nyght, or artow dronke. . . .
So that thou mayst nat holden up thyn heed?"

with interference with speech and deglutition. In milder cases the patient may appear quite well except that his legs double under him when he attempts to stand. The disease is usually afebrile, but in some cases a rise of temperature has been recorded.

Prognosis is favourable if the tick is removed before the muscles of respiration are seriously involved, and improvement is usually rapid. Most of the published cases have occurred in children, but adults are not exempt from attack.

Whether these symptoms are of infective or of toxic origin is unknown. The negative results of cultures and inoculations, and the prolonged period of attachment necessary to induce paralysis, favour the latter suggestion, but are not conclusive. Nuttall and Hindle[14] have shown that East Coast Fever can not be communicated by the inoculation of even 7 litres of blood infected with *Theileria parva*, nor can infected *Rhipicephalus appendiculatus* transmit the disease during the first two days of attachment.

Tick Paralysis in North America must have existed unrecognised for years, and a similar diagnostic confusion may possibly obtain elsewhere. Certainly some medical men specifically questioned can recollect cases of obscure and undetermined origin encountered in various tropical countries which might conceivably have been some form of Tick Paralysis, or where this possibility at least might have been considered. Obviously the presence of ticks on a paralysed person may have no significance whatsoever, but such a coincidence requires careful investigation, including experimental work if possible.

This paper has been compiled at Dr. French's suggestion in the hope of directing attention to a disease which if sought will probably be found more widely distritbuted than is apparent at present, and also to place Dr. Nash's interesting cases on record.

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Pass List.

University of London.

M.D.

JULY, 1923.

Branch IV.

(Midwifery and Diseases of Women.)

T. G .D. Bonar, B.S.

Branch VI. (Tropical Medicine).

G. Covell, B.S.

2nd Examination (M.B.,B.S.) for Medical Degrees.

JULY, 1923.

PART II.

C. E. Allen.
E. H. J. Berry.
D. G. Brown.
S. Chazen.
H. W. Crook.
D. C. M. Ettles.
J. Evans.
C. H. Highfield.
W. Leslie.
C. W. Marshall.
C. E. H. Moykopf.
J. D. Rear.
E. S. Rudaizky.
L. S. Williams.
J. Wiseman, B.Sc.
A. H. Musgrove.

PART I.

K. C. Billingham.
F. W. Bradley.
S. L. A. Clarke.
J. P. Evans.
J. P. Fraulo.
C. E. Gallagher.
E. C. H. Huddy.
D. F. Hanaar.
A. B. Kettle.
S. C. H. Lane.
R. J. Milbank.
C. B. Picken.
L. G. J. Pitt-Payne.
H. W. A. Post.
T. M. Robb.
N. Rosen.
A. H. Russell.

Change of Address.

Capt. G. Covell, I.M.S., c/o Messrs. Grindlay & Co., Bombay.

E. E. Delisle Gray, M.R.C.S., L.R.C.P., 62, Hampton Road, Upper Teddington, Middlesex.

C. R. Nicholson, M.R.C.S., L.R.C.P., Regional Headquarters, Ministry of Pensions, Midland Region, Birmingham.

Misplaced Teeth: Difficult Extractions.

CLINICAL LECTURE BY G. B. PRITCHARD, M.R.C.S., L.R.C.P., L.D.S.

GENTLEMEN,—I have taken impacted teeth for the subject of this lecture, and will include certain gross abnormalities in position which call for surgical rather than for orthodontic treatment. Such conditions may give rise to symptoms of varying severity and may lead to complications of the utmost importance.

Speaking generally, the treatment consists of the removal of the tooth primarily, or of the obstruction which has arisen because of its misplacement, and should be carried out as early as possible in a quiescent stage before any complications have arisen.

The tooth which I imagine will be the one to occur to you first is the mandibular third molar, and this is by far the most common one to be badly misplaced. The upper third molar is also a tooth whose position may be very variable. Other teeth which I would like to consider are the canine teeth and then the premolars, both maxillary and mandibular.

ÆTIOLOGY.

As you know, there is a strong tendency in modern civilised races to a reduction in the size of the jaws and also in the size and number of the teeth. The reduction in jaw size is, however, in advance of the reduction of tooth size.

The result of this is to curtail considerably the amount of room in the alveolar process available for the teeth. And the last teeth to be erupted will be the ones to suffer most.

At all ages the horizontal ramus and alveolar process should be sufficiently long to accommodate all the teeth normally present in it.

In studying the development of the teeth it is observed that the tooth band is connected with the oral epithelium directly above it in the region of the milk teeth and their successors, but that it loses this connection and grows downwards and backwards into the body of the bone under the base of the ascending ramus before it gives off the enamel organs of the permanent molars.

As these teeth calcify and their time of eruption approaches, the growth of the horizontal ramus backwards provides a space for them to erupt into.

When, as is often the case, there is not sufficient room, and in such cases the ascending ramus begins immediately behind the second molar, the third molar erupts until it meets some obstruction and then it is a condition known as "impacted."

The obstruction may either be the base of the ascending ramus or the second molar.

During development the crown of the tooth faces forwards and upwards; and during the process of eruption the tooth moves roughly along an arc of a circle. These periods of eruption occur at intervals and recur until the tooth is in position. When impaction has taken place these eruptive spasms still recur, and it is at these periods that the symptoms are likely to be most noticeable.

I might say here, in parenthesis, that this tooth is erratic in its behaviour, and may, even when fully developed, and in a favourable position, fail to erupt, although there is no mechanical obstruction.

Two such cases came to me recently. One, a middle-aged man, edentulous except for this tooth, which was lying in a good position with one cusp palpable at the bottom of a sinus. The other, a man of 35, with no molars or premolars on that side, had this tooth lying in good position under a flap of gum. In both cases there was suppuration in the crypt.

The usual position is between two extremes. One where it attains good vertical position behind the second molar, but is covered by the base of the ascending ramus; and the other where it lies horizontally with the whole of its occlusal surface in contact with the posterior surface of the second molar anywhere along its length.

In any of these positions it may be covered by bone and mucous membrane, by mucous membrane only, or it may be partly erupted with some part of a cusp showing in the mouth.

The last position is, in my mind, the most important, because of extreme likelihood of infection taking place. Abscess formation round such a tooth may lead to a spreading cellulitis of the neck, which may be fatal.

SYMPTOMS.

Many of these impacted teeth give rise to no symptoms whatever and their presence is only discovered accidentally.

Pain is the most constant symptom and may vary in character. It is usually neuralgic, and is at its worst while an eruptive period is in progress. During the intervals it may be absent. The point of maximum intensity is in the ear, and one constantly sees cases which have been first to the aural surgeon because of the earache. It is sometimes referred down the neck, giving rise to a sore throat.

The pain is sometimes in the teeth, especially when the obstruction is the second molar and this tooth becomes very tender. All the teeth anteriorly up to the incisors may also become tender owing to the transmitted pressure.

At other times the root of the second molar is absorbed sufficiently to expose the pulp—in which case severe toothache will occur, the result of inflammatory changes taking place in that organ.

TREATMENT.

Remove the tooth.—The alveolar process in the mandible gets progressively shallower towards the back of the horizontal ramus and ends behind the last molar at the base of the ascending ramus. This means that more of the root is embedded in the body of the bone, which is here very thick. It is this that makes the removal of even a well-placed third molar more difficult than the others.

It is often impossible to dilate the socket by ordinary methods, and for this reason the straight elevator is the best instrument to use. It lifts the tooth from its socket by leverage, and no dilation is required. When the tooth is impacted these difficulties are increased, as there is often no alveolar bone at all and it is partly or completely surrounded by the dense bone of the body.

The obstruction has to be removed. — Immediately behind the last molar tooth is a small triangular area; bounded on the outer side by the external oblique line which runs upwards to the anterior border of the ascending ramus, and on the inner side by a faint ridge continued from the inner alveolar process which meets the former about one quarter of an inch above the orclusal plane of the teeth, and in front by the posterior surface of the second molar. Internal to this is the side of the tongue and external the buccinator.

The mucous membrane here also changes. Instead of being tightly bound down to the bone as the muco-periosteum, it has lying beneath it some loose areolar connected tissue, which is very easily infiltrated.

In certain cases intermediate between the two extreme types I mentioned earlier, where the impaction is produced by the second molar, the removal of this tooth will allow the forward and upward movement of the third molar to take place. The resultant occlusion is, however, rather faulty.

The operation should be performed under general anæsthesia, in which case ether by the intratracheal method should be employed; or, in suitable cases, under local anæsthesia by blocking the mandibular nerve and by local infiltration.

The bone is first exposed by a suitable incision and the mucous membrane and periosteum well reflected. Then all bone over the crown, and, if the tooth is lying more or less horizontally, as much of the root as may be necessary, must be removed. This can be done by bone-cutting burs on a straight hand-piece, or by a chisel.

When the tooth is impacted vertically the crown must be well freed above and behind to prevent further impaction when the tooth is partly elevated. The socket usually has to be enlarged, and this can be done with a fissure bur on a R.A. handpiece.

When the tooth is horizontal the outer side of the crown must be thoroughly freed to allow of its removal.

The after-care is most important.

There is considerable inflammatory reaction from the trauma, which is increased by the infection that is nearly always there. Because of the lack of natural drainage constant irrigation at intervals of two to four hours should be carried out until the inflammation subsides and the socket is granulating. Later it should be washed out twice daily to remove secretions and food debris. H_2O_2, 10 volumes, well diluted with hot water, is a suitable solution.

After pain is often very severe and persists for some days or even weeks. It may even be necessary to give $\frac{1}{4}$ gr. of morphia on recovery from the anæsthetic, and to continue with aspirin in x. gr. doses until the cavity has closed.

Cases occasionally occur in which the third molar is completely displaced and lies any-

where in the angle and ascending ramus. It may even be inverted, and may tend to erupt downwards through the skin.

The Upper Third Molars.

These teeth are sometimes misplaced in the tuberosity owing to under-development of the maxilla, but they seldom become impacted. During development they lie with their crowns directed downwards, backwards and outwards, and with the formed portion of the roots in close relationship with the antrum.

The growth of the jaw backwards depends on the expansion of the antrum, and it is this expansion, apparently pushing the roots backwards, that determines the normal position of this tooth in the arch as it moves downwards.

When this normal expansion does not take place, the tooth tends to erupt pointing backwards towards the ascending ramus or towards the buccal sulcus behind or above the second molar. Sometimes, and in this it may be compared with the lower third molars, it comes to full development and remains unerupted high up in the tuberosity in close relationship with the lower and back part of the antrum, without there being any obstruction.

I have seen this in the case of a middle-aged woman who was edentulous. The tooth was only discovered radiographically when looking for the cause of neuralgia due to peripheral irritation.

The removal of such teeth does not present the difficulties associated with the lower third molars as the bone is much more cancellous. On the other hand the difficulties of access may be greater.

It is essential to open up the bone widely and remove all that is lying superficial to it. Once the crown is exposed and the forceps applied, the rest is straightforward.

One complication that tends to occur frequently is that of opening the antrum. If this does occur the greatest care must be taken to avoid its infection. Frequent irrigation must be employed, and in favourable cases the opening is soon obliterated by granulation tissue and the risk of infection fades away.

Canines and Premolars.

Other teeth which are frequently grossly misplaced and impacted are the canines and premolars, both upper and lower. The canine probably more often than the premolars. These misplacements depend on a variety of causes. The canine teeth have to travel further, from the position in which they develop to their final position, than any other tooth. In the maxilla they lie between and well above the lateral incisor and first premolar, which are almost in contact. In the mandible they lie close to the lower border of the bone. There is, therefore, a far greater probability of their being deflected from their normal path of eruption, and if there is any obstruction their final position may be anywhere in the alveolar process, pointing forwards, backwards, inwards or outwards and completely unerupted. In one case I saw recently the right upper canine was lying with the tip of the crown behind the apex of the root of the lateral incisor and the tip of the root between the apices of the first premolar. These cases are best dealt with under a general anæsthetic. The bone must be opened up well until the tooth is fully exposed. It can then be lifted out whole or after being cut up.

There is another cause operating on these teeth to produce impaction or total displacement. They have to erupt between teeth already in position the lateral incisor and first molar. If this space becomes contracted in any way, *e.g.*, by the forward movement of the first molar as a result of early removal of the temporary molars, the last of these teeth due to erupt has no space, and it either becomes impacted in the arch, erupted in bad position or totally misplaced and unerupted.

Difficult Extractions.

The subject of impacted teeth brings one to the consideration of difficult extraction in general.

Normally, extraction is carried out by a definite sequence of movements resulting in the complete removal of the tooth from its socket.

The blades are applied to the neck of the tooth and are then forced up into the socket through the superficial fibres of the periodontal membrane to obtain a grip on the root inside the alveolar bone. The socket is then dilated by the appropriate movements which either bend the alveolus or partly fracture it. The fibres of the periodontal membrane are then ruptured, if the previous movements have not already done so, and the tooth is lifted from the socket. Teeth are never pulled out.

The difficulties can be considered under various headings.

1.—Condition of the Teeth Themselves.

Under this heading comes teeth with—

(a) *Unduly long and twisted roots.*

(b) *Unduly divergent roots* (as in some molars).

(c) *Exostosed roots.* And

(d) *Union by false gemination.*

These usually can only be diagnosed accurately by radiography, and all cases should be so examined if there is a history of previous difficulties, or if the clincal examination suggests them. A long or twisted root can often be removed after a prolonged attempt at dilatation of the socket. I would like to say here that it is better to fail completely at a difficult extraction than to remove the crown from the root. A subsequent attempt after a few days is likely to be more successful when the bone is softened by inflammatory infiltration.

Widely divergent roots which lock the tooth in its socket can often be divided with a bur and each one removed separately comparatively easily.

Exostosed roots often present great difficulties. They tend to fracture at the limit of the exostosed area, which remains in its cavity in the bone and is too large to pass up the rest of the socket. In these cases the socket should be enlarged with a bur to allow the passage.

Geminated teeth should be treated surgically, that is, the bone is exposed through a suitable incision and sufficient is removed with burs and chisels to allow of the removal of the joined teeth.

2.—Condition of the Bone.

a. *Normal.*—We have already discussed difficulties connected with the third lower molar because of the thickness of the bone and shallowness of the alveolus. (This holds to a lesser degree with the second molar.) The straight elevator is the best instrument in these cases. No dilatation of the socket is necessary. Very powerful leverage is obtained with the bony septum between the second and third molar as fulcrum, and the tooth is lifted. This is aided materially by the usual convergence of the roots and their backward curvature. If the roots are separated and divergent they can be separated before elevating.

b. *Pathological.*—Sclerosis of the bone around the roots of the teeth which have long been pulpless or where there is chronic periodontal disease often occurs. In these cases, too, the roots themselves are likely to be very hard and brittle (normally they are tough), in pulpless teeth because the dentine is very little vitalised, and in the latter case because of hypercalcification. In these cases the roots are likely to break before the socket gives way, and the socket must be dilated very carefully. Alternatively the removal can be done surgically as for geminated teeth, by the removal of the associated external alveolar plate.

3.—Other Conditions of the Teeth.

(a) *Roots decalcified by caries below the alveolar margin.*

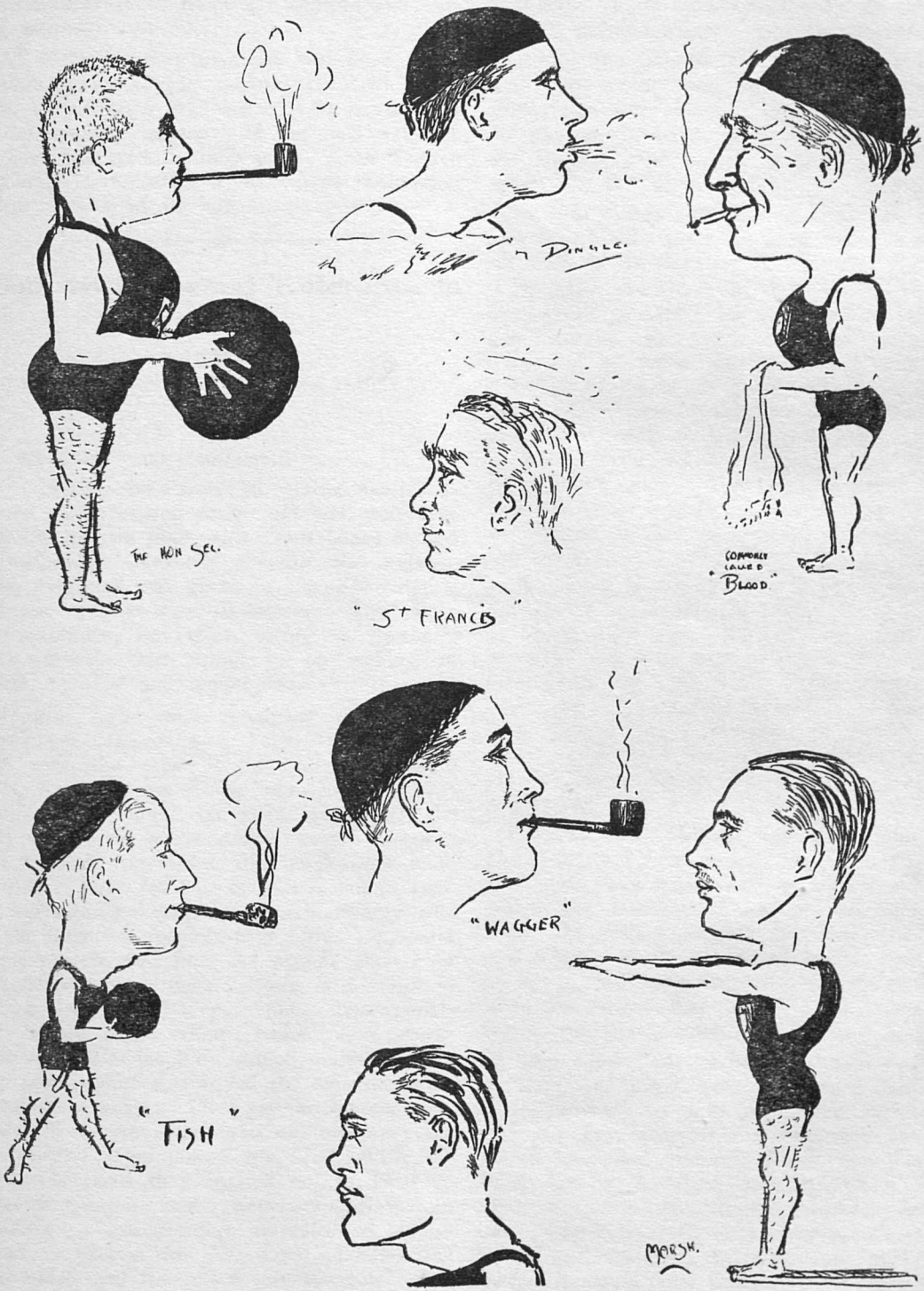
(b) *Roots broken at or beneath the alveolar margin.*

(c) *Misplaced erupted teeth.*

a and b.—When roots are carious or broken off below the gum margin it is often impossible to insert the blades of the forceps between the bone and cementum, and no hold can be obtained. Sometimes the forceps are then applied to include gum bone and tooth, and the fragment is squeezed upwards. This is not a good method as it entails considerable laceration and bruising, and predisposes to sloughing and necrosis. Alternatively the forceps are forced up under the periosteum to include bone and tooth. This is also not a good method, as it predisposes to necrosis.

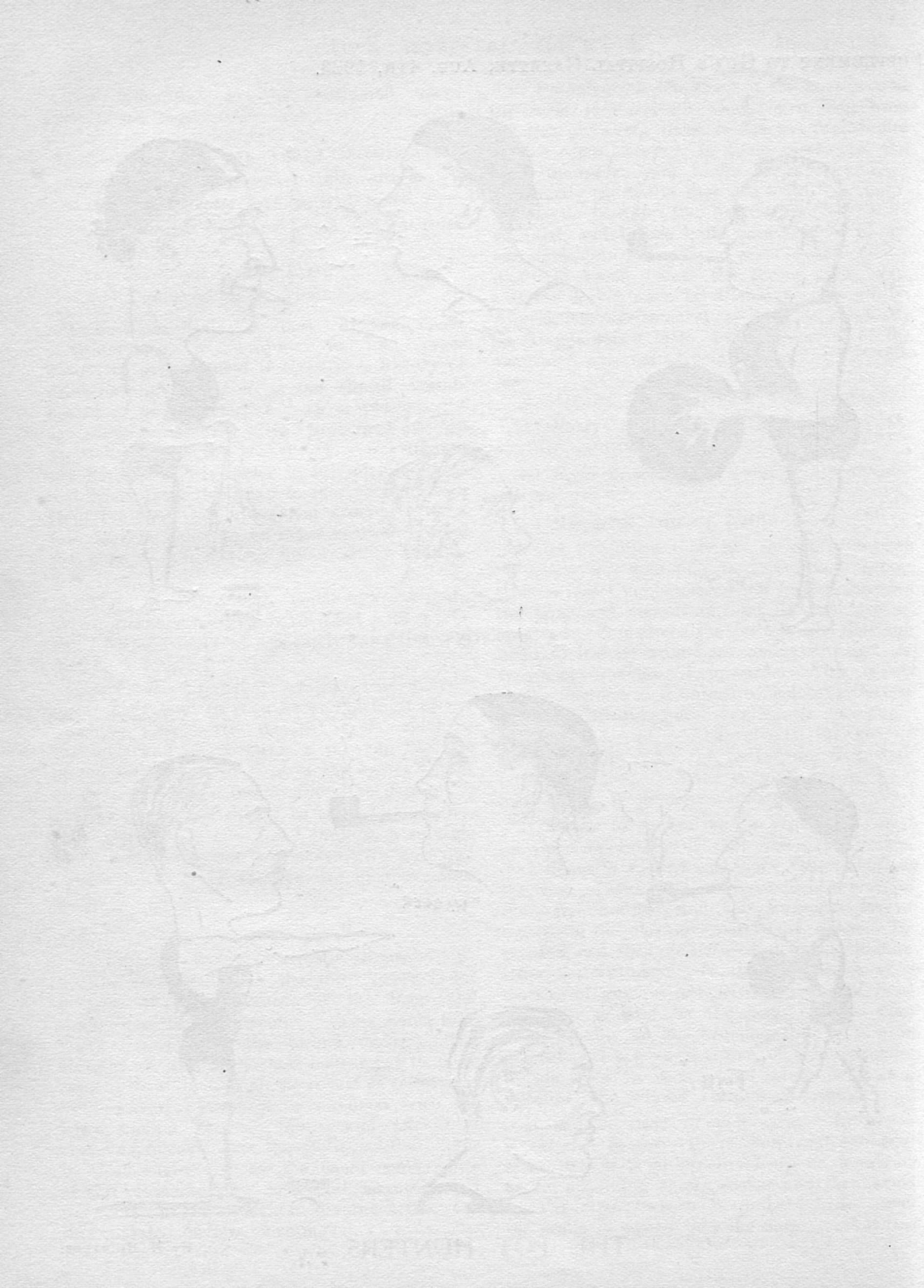
It seems to me to be far better to make an open operation of the case. The mucoperiosteum is incised and bone removed along the line of the root. A complete view can then be obtained and the fragment levered out with an elevator under the apex. The incision can then be sutured, leaving sufficient space for drainage. In this way there is no tearing of gum or extensive bruising of bone. If a bur is used for the bone removal there will probably be less bruising than if a chisel is used. If a part of a root of a lower molar, or one root in a series of lower incisors is retained, the curved elevator is useful.

It can be used in two ways. In one it is inserted between the septum and the fragment, which is either lifted up or forced on to the adjoining empty socket and then lifted. In the other, which is probably the easier, the blade is passed into the empty socket, and



THE POT HUNTERS.

By H. RICHARDS.



by rotation breaks down the septum and lifts the retained root out.

All difficult extractions are best done under prolonged anæsthesia—general or local. The more time there is, the less will be the amount of unnecessary trauma. If the case warrants it, novocaine anæsthesia is best. Even if nerve blocking is indicated, a little local infiltration helps because of its hæmostatic effect.

Food, with Special Reference to Vitamines.

Paper read before the Physiological Society by J. WISEMAN, B.Sc.

Mr. Chairman and Gentlemen,

During the French Revolution the shortage of meat became acute. It was suggested that the gelatin obtainable from bones should be utilised. Curiously enough the gelatin, when extracted was given to Hospital patients and the results were disastrous. The cause was unknown, but later, owing to Fischer's work, gelatin was found to be lacking in lysine, tyrosin and tryptophane.

Hopkins, who was connected with Guy's Physiology Department, began to work in 1906 upon the value of the individual amino acids, to determine which were essential and whether any could be transformed by the body into any other amino acid. Osborne and Mendel, Americans, did much work more recently. They fed rats on starch, sugar, lard, agar as intestinal roughage, and inorganic salts in the form of protein-free milk, *i.e.*, milk minus protein and fat. As protein they gave zein derived from maize. Zein is deficient in glycine, lysine, and tryptophane. The animals lost weight, but when lysine and tryptophane were added they gained weight. When only tryptophane was added the animals maintained their weight. Thus glycine is apparently produced by the body, lysine is necessary for growth and tryptophane for life. With the same substances they carried out in 1915 an interesting experiment. Rats were allowed to maintain a constant weight on zein and tryptophane as protein for 550 days. Lysine was then added and the rats began to grow. The curious fact is that the rats began to grow 250 days after they would normally have reached maturity. Thus there seems to be an inherent growth impulse affected by environment.

Whilst the importance of the various amino acids was being determined some unexpected discoveries were made. It will be necessary to mention in some detail the diets used in the various experiments, as it is essential to appreciate the differences.

In 1881 Lunin fed mice on milk fat, rasein and sugar. To some he gave salts, but they all died in 36 days.

Hopkins published in 1912 work he had commenced in 1906. He used purified raseinogen, starch, cane sugar, lard and inorganic salts, but he found that the young rats only lived if 2—4 c.cs. of fresh milk were given each day. Recent work has shown that this amount of milk is not at all sufficient, but probably purer substances were used in the later experiments. However, Hopkins' work was extremely useful because coming from a well-known worker it focussed attention upon the subject.

Stepp, in Germany, was investigating the importance of lipoids in 1909. He fed mice on bread made with milk and found that if he extracted the food with alcohol and ether the mice died, but they lived if the extract was added to the extracted food. He seemed to have proved the importance of lipoids, but although he used instead of the extract each of the known lipoids he could not keep the mice alive.

Osborne and Mendel and McCollum and Davis in 1911 used rasein, lard, and the first two used cane sugar and protein free milk, whilst the latter used lactose and inorganic salts. In both cases they found that to keep rats alive a small amount of butter, cod liver oil or egg fat was necessary. They put forward the theory that these "good" fats contained something essential for life.

In the same year, however, Casimir Funk, a Pole, published some work on beri-beri, which I shall go into later, and he showed that the polishings of rice contained a factor which he called vitamine which was essential in a diet if beri-beri was to be avoided. The good fats were found, however, not to cure beri-beri. Confusion arose since the Americans, thinking that they had used pure material, could not imagine that any such factor could be present in their diet. They purified their protein by boiling it for an

hour with absolute alcohol under a reflux and then removing the alcohol by filtering with suction. This was repeated three times. The protein was then dried and used. The lard they melted and poured into absolute alcohol heated to 60° C. It was allowed to cool, filtered by suction and dried over a steam bath.

McCollum tried to clear up the matter and found that his pure lactose obtained from Kahlbaum cured beri-beri, but on repeated crystallising from water it lost this property, and the protein-free milk of Osborne and Mendel was found to have the same property of curing beri-beri. Thus two vitamines were apparently essential—one found in good fats and therefore called Fat Soluble A, the other soluble in water and called Water Soluble B. Still another vitamine was found in orange juice which cured scurvy in man and this was called Water Soluble C.

I shall now deal with the various diseases associated with a deficiency in one or other of these vitamines.

Beri-beri was a disease fairly common amongst the rice-eating peoples of the far East. The earliest record according to one author goes back more than 2000 years B.C. It was thought to be tropical, but to mention one fact disproving this, in 1894, 150 cases were mentioned as being present in a Dublin Asylum with 23 deaths.

There are two forms of the disease—a dry form where there is paralysis and great wasting of the limbs, and a wet form characterised by a dropsical condition of the lower limbs. There are severe nervous and heart symptoms with digestive troubles. The knee-jerk and other reflexes disappear, and finally the legs become paralysed.

In 1880—1890 Takehi, Medical Inspector General of the Japanese Navy, after a comparison of other navies, reduced the rice ration of his navy and introduced instead meat, milk and vegetables. The beneficial results were marvellous, and beri-beri was thought to be due to nitrogen starvation.

In 1897 Eijkman at a Java prison noticed that fowls fed on boiled polished rice from the prison suddenly developed what he called polyneuritis. He noticed its resemblance to human beri-beri and he proved the condition was not due to infection nor to monotony of diet, since the fowls kept quite well if fed on unpolished rice. He then experimented on the prisoners, some of whom were suffering from beri-beri, and was able to cure them by giving them unpolished rice. He attributed the healing property to something in the polishings which acted as an antidote to bacterial poisons in the intestine produced from the large carbohydrate supply in the rice.

No further work was done until, in 1908, Fraser and Stanton in the Malay Peninsular cured fowls suffering from polyneuritis by giving them an alcoholic extract of rice polishings. They also confirmed Eijkman's work on prisoners.

Many workers became attracted to the subject, but I must come to 1911 when Funk brought out his paper and first used the word vitamine. He said that the polishings contained a vitamine which was essential for life. He thus clearly distinguished beri-beri as a deficiency disease from other infectious diseases. It must be mentioned here that before Funk's paper was published, owing to the great advances made in bacteriology, people were inclined to attribute all diseases to bacteria, and so the work of earlier investigators of beri-beri was not appreciated. Funk showed that this vitamine was also present in yeast, and he tried to extract the vitamine pure. In fact in his paper in 1911 he thought that he had already obtained it in a crystalline state, and as the substances seemed to be an amine, he called it vitamine. He started with 200 pounds of yeast, and by the usual methods for extracting alkaloids, he obtained 1/12 oz. of a very active material. In his fractionnating he determined the vitamine-containing fraction by its curative action upon polyneuritic birds. The work was of a very tedious nature, but so active was the final product that 1/15,000 of an ounce cured a polyneuritic pigeon in several hours. Even the end product was not pure, as he discovered later. He repeated the work and several other biochemists tried their hand, but the product was generally found to contain nicotinic acid. This gave rise to the idea that the vitamine was an active form of nicotinic acid, since the acid itself had no beneficial properties. Other substances have, however, been found in the end product, so that its presence is probably merely as an impurity.

In 1888 Hirste described beri-beri in infants in the Far East, where there was a high mortality. It should be appreciated that 75

per cent. were breast fed, but the mother's milk was deficient owing to the mother's food consisting of polished rice. Generally the mother has only sufficient for herself, but not enough to pass on. Experiments show that the mother will sacrifice herself in order that her infant may get as much as possible of the vitamine and the result is that both mother and child usually suffer from beri-beri. If the mother is fed on rice polishings the child recovers, and in 1914 the Philippine Government commenced distributing the polishings free. Cure occurs within a day or two. In birds, which are best for experiments, symptoms similar to the dry beri-beri are noted, and cure occurs within 6—8 hours.

Another deficiency disease, scurvy, was extremely common at one time amongst sailors. The symptoms are fatigue, headache, disinclination for exertion, pain in joints and limbs. hæmorrhages into the tissues, bleeding from the nose and the loosening and falling out of the teeth. As early as 1720 Kramer, in his Medicine Castrensis said that neither medicine nor surgery could relieve scurvy, but green vegetables or fresh juice from oranges or lemons would.

In 1775 Lind wrote a complete history of the then knowledge of scurvy and he came to similar conclusions. There is no doubt that Captain Cook made use of this knowledge, for writing in 1776 of his voyage he said that he had always tried to obtain fresh food for his sailors whenever he reached land.

In the Middle Ages scurvy was known as the "Disease of London," for in winter the poor lived on salted meat owing to the impossibility then of feeding animals during the winter. The landowners did obtain fresh meat, for they originated the idea of game preserving and pigeon breeding.

About 1771 lime juice was largely used to prevent scurvy. There was remarkable freedom in the Navy after its compulsory use in 1804. In recent Arctic expeditions, however, lime juice was found to have no beneficial effect, and after 4—6 months the men became diseased. Miss Smith, in 1918, discovered that originally lime juice was the juice of the sweet lime or lemon from Spain. About 1860, in order to encourage Colonial enterprise the limes cultivated in the West Indies were used. They were called sour limes, and their acidity was thought to be an advantage, but reliance upon them led to disastrous results.

Infantile scurvy was described by Barlow in 1883, and the condition is named after him for previously it was thought to be rickets. He showed that sometimes both are present. There were digestive troubles, marked pallor and blue rings round the eyes. The infants cried when touched, and pain was located in the swollen lower limbs. The bones were brittle, the gums swollen and spongy and easily bled, and there were hæmorrhages into the tissues. Dr. Chick investigated a large number of cases recently in Vienna and she used tomatoe juice with good effect.

Owing to the war disarranging food supplies and deficiency diseases resulting, our knowledge of these has increased much. Normally, few people possess the symptoms I have mentioned as being associated with beri-beri and scurvy. owing to our food being of such a variety.

Possession of those symptoms would indicate an entire absence of the necessary vitamines for at least two months in the case of beri-beri and four months in the case of scurvy. It is evident, however, to all workers on the subject that owing to the large amount of prepared foods consumed with a corresponding small amount of fresh natural food, people do *not get sufficient vitamines.* But what results from a partial deficiency increased by faulty methods of cooking and the use of poor foods characterised in the diet of the poorer classes? The resistance to infection is lowered. Of course I am not referring to small pox and such diseases, but to tuberculosis, pneumonia, ulceration of the cornea, which I shall deal with later, dysentery, such as the famine and gaol type, and inflammation of the alimentary tract. The secretory and digestive functions are impaired, the nervous and muscular mechanism controlling the movements of the stomach and bowels become ineffective.

McCarrison, in his "Studies in Deficiency Diseases," has published a lot of work in connection with diseases following lowered resistance, and he has shown that a very close connection exists between the supply of vitamines and the normal working of the ductless glands. A partial deficiency is a menace to middle age since, although a patient showing complete symptoms of beri-beri owing to the lack of water soluble B, is cured in several days by rice polishings or yeast, yet if there

has been a chronic partial deficiency the condition is well nigh incurable.

There is no doubt that the body can store up the vitamines to a certain extent, for if an animal is fed on a diet deficient in vitamine A the animal continues to add on weight for a time, then it declines, *i.e.*, its store is used up. If vitamine B is absent the effect is more quickly apparent, so that vitamine B is probably not stored much. Vitamine C does appear to be stored up and considerably.

Most authors emphasise that animals depend for their supply of vitamine upon the plant kingdom, but even plants do not appear to be self-supporting.

In 1901 Wildiers showed that if a large amount of culture medium is inoculated with a small amount of yeast there is no growth as there is if a small amount of medium is used. If to the quiescent yeast culture small amounts of boiled yeast extract are added there is growth. Wildiers called the invigorating substance Bios, and its solubility in various solvents and its presence in substances other than yeast extract have been determined. This phenomenon was probably the cause of the great controversy between Liebig and Pasteur, since Liebig probably used too small an amount of yeast to observe growth. The yeast does not make Bios but it seems to be produced by dying yeast cells. Much work has been done by Williams, of Chicago, and other Americans, but I must come to 1914 when Bottomley and Mockeridge, of King's College, found that to keep primula seedlings growing healthily and normally for any length of time an extract of decaying organic matter had to be added to the usual culture solution. Aqueous extracts of decaying peat, decaying leaf mould or stable manure were used. The growth was at least twice as fast as in the absence of the extract. The extract, when added to the bacteria causing the decay, stimulated their growth remarkably. It has been suggested that it will be possible soon to diagnose infectious diseases more rapidly owing to the shorter time it will take to obtain cultures for examination by adding some suitable material. Prof. Bottomley called the growth accelerator Auximono, and workers are agreed that they are similar in function to the vitamines even if not identical with those known.

I shall now describe some more deficiency diseases. In 1857 Mackenzie noticed that children fed on a diet poor in fat suffered from an inflammation of the eye which became known as Keratomolocia. 1,500 Japanese children were examined. Their diet lacked vitamine A, and they had diarrhœa, excessive appetite, swollen abdomens, night blindness, and dryness of skin and hair. Over 100 developed the disease, which was cured by cod liver oil.

In 1915—1917 there was a great outbreak in Copenhagen, which was found to be due to Pasteurized milk not possessing any vitamine A. If whole milk were given instead of cod liver oil the recovery was generally too slow to save the eyesight.

In Roumania there was a great outbreak folllowing the removal of the cows by the Austrians. Dr. Wells, a Chicago pathologist, cured the children whose eye disease had not gone too far with cod liver oil.

In 1917 McCollum and Davis produced the same condition in rats by feeding them on a diet deficient in vitamine A. They called it Xenophthalmia and cured it by cod liver oil. The actual inflammatory condition was caused by bacteria, but these are harmless unless the resistance is lowered. It was found that ophthalmic surgeons could not cure for any length of time, but cod liver oil acted like magic, the condition cleared up in a very short time. This is a good example of the effects of lowered resistance, and the danger of keeping too near the border line as regards store of vitamine cannot be over-emphasised.

In 1918 a disease, Hunger Osteomalacia, was first noticed in adults somewhat allied to the osteomalacia that commonly occurred in pregnant women. There was anæmia, dry harsh skin, stiff waddling gait, with feet far apart owing to the acute pain caused by movement of hip, knee and foot joints. The disease is readily cured by cod liver oil. Dr. Chick noticed that the food in Vienna where this disease was very prevalent consisted of bread, vegetables, flour and sugar, but no milk, eggs or butter owing to their high prices.

Pellagra was a very prevalent disease in Italy, Roumania and the Southern States of America where maize is used to a large extent. The symptoms are—

1. Disturbance of the whole digestive tract. There is constipation at first followed always by diarrhœa. The tongue is sore and inflamed. There is little hydrochloric acid in the stomach. The stools are liquid and may contain blood.

2. A skin eruption usually bilaterally symmetrical on back of hands and neck, or a butterfly shape radiating from the bridge of the nose. The skin peels, leaving the skin dry, shrivelled and pigmented, hence the term Pellagra, which means "rough skin."

3. Nervous and mental symptoms: depression, headache, sleeplessness and giddiness.

There is no evidence of the disease in Europe before Columbus introduced maize. Funk in 1913 thought it was due to a loss of something in the milling process, but no product of maize could cure it.

Modern work and knowledge is due to Dr. Goldberger, Surgeon of the United States Public Health Service. He showed in 1914 that the disease was not infectious, since he found that attendants never caught it from patients. He suggested that it was due to too little protein of animal origin, and he showed that Pellagra generally increased with the cost of milk, eggs, and meat. Eleven healthy convicts, bribed by an offer of freedom, were fed in excellent hygienic conditions upon biscuits made of white wheat flour, preparations from maize, gravy, syrup, sugar, coffee, cabbage, potatoes, rice and fat pork. In the second month all had headache and abdominal pain with great muscular weakness, while the skin eruption appeared in five months. The convicts then decided that they had had sufficient.

Advanced cases are difficult to cure, as digestion has become too disordered, otherwise milk, eggs, meat and fish will cure. Dr. Goldberger thinks one or more of the following factors are involved: (1) a protein supply of low biological value; (2) inadequate supply of fat soluble A; (3) a defective mineral supply. Rice eating countries are free from Pellagra because rice protein more closely resembles animal protein than does any other cereal protein.

Chick and Hume in 1920 produced in monkeys fed on zein as protein bilaterally symmetrical skin eruptions and cured them by animal proteins. Dr. Goldberger's views are not yet universally accepted.

Finally, I come to rickets, which unfortunately cannot be dismissed as it usually is by attributing it to a deficiency in fat soluble A. Only the English School thinks so. The subject has become rather obscured by much published work in 1922. The disease is seldom observed in children under six months. Characteristic symptoms then appear. The head enlarges and becomes flat on top with bulging sides. The children look flabbily fat, their bones grow irregularly and remain soft and cartilaginous. The ends of the long bones enlarge chiefly at the wrists and ankles. The chest wall is distorted, followed by lung and heart trouble. The child seems double jointed owing to the queer positions its limbs take up. The children are very sensitive to touch, their temperature is generally high and there is profuse sweating. The disease is not fatal, but the resistance is lowered so that bronchopneumonia, tuberculosis, etc., readily follow. In 1918 Mellenby fed puppies on separated milk, white bread, yeast for vitamine B, orange juice for vitamine C, 1 to 2 gns. of salt and linseed oil. The animals developed rickets unless the linseed oil was replaced by cod liver oil or whole milk. The amounts of antirachitic factor in these did not correspond exactly to the amounts of fat soluble A, but the presence of the latter was determined by experiments on rats and this may account for the difference. Mr. Mellenby studied the effect of the disease on the teeth of the puppies. On a diet with cod liver oil the permanent teeth replaced the milk teeth well. In its absence the teeth were very poor. The interesting fact is that the food in all the experiments was given in a pappy state so that the softness of our food will not account for defects in human teeth, just as thorough mastication was not found to eliminate gastric troubles. Rachitic children are invariably found to have bad teeth and the majority suffer from adenoids and tonsils. The theories on the etiology of rickets fall into two classes (1) dietetic, (2) hygienic.

Since certain fats cured the disease it was thought to be due to a deficiency of fat. Bland Sutton recently cured zoo lions with cod liver oil. The English school attributes the healing power to fat soluble A.

It was thought to be due to excess of carbohydrate, but such a diet probably consisted mainly of cereals, wheat and rice, which

furnish large amounts of carbohydrates and was unbalanced. It was also thought to be due to a deficiency of calcium, but excess of calcium salts does not prevent rickets; on the other hand, McCollum has shown in 1921, that with little calcium rickets follows even if much fat soluble A is present. This is not accepted entirely although it is admitted that the bones are soft if little calcium is present in the food.

Concerning hygienic conditions it is more or less helpless to get at the truth at present. Rickets has been ascribed to confinement and lack of exercise as recently as 1918 by Findley, to insufficient space in houses and imperfect parental care by Miss Ferguson, in 1918, and to insufficient exposure to ultraviolet light from the sun by Hess and Unger, in 1921. The last theory is gaining more and more support and experiments seem to show that sunlight or exposure to ultraviolet light will prevent or cure rickets in spite of a defective diet.

Finally, McCollum has put forward in 1922 the theory that there exists an enterochitic vitamine distinct from A. To summarize, it may be said that concerning the treatment everyone is agreed that crude cod liver oil should be used. As regards the etiology, four factors are probably concerned in different degrees, viz., ultraviolet light, exercise, calcium, and vitamine A, or one so similar that at present they are indistinguishable.

Concerning the connection between keratomalacia and rickets, both of which are supposed to be due to lack of vitamine A according to the English school, it is thought that keratomalacia is due to a fairly complete absence of A, whereas rickets is due to a partial deficiency over a long period. The eye trouble accompanies a stoppage of growth, whereas rickets occurs in a rapidly-growing child and rarely in a marasmic infant.

Some knowledge of the chemical properties of the vitamines is essential if advice is to be given upon the cooking of foods. Water soluble B is the most stable. It is not destroyed by drying nor heating to 100°. It is soluble in dilute alcohol, but sparingly in absolute alcohol, chloroform, ether or benzene. It is not readily destroyed by acids, but it is more sensitive to alkali, so that it is unaffected by cooking if the practice of adding soda to soften cooking vegetables is not followed.

Water soluble C is very readily destroyed by oxidation, heating or drying. It is more stable in an acid medium, but if the medium is not acid, naturally the addition of acid decreases its stability rather than increases it. If it is necessary to heat the medium, then boiling quickly is better than slow heating, but orange juice, owing to its natural acidity, can be dried in vacuo without much loss of vitamine, and this is made use of when it is necessary to administer a large amount of the vitamine at once.

Not much is known about fat soluble A. It is not a fat itself, as it is not saponified, nor is it affected by alkali as Stemboch showed in 1921. It is fairly stable to heat, but only in the absence of atmospheric oxygen. It does not appear to have any nitrogen or phosphorus in its molecule.

Unfortunately there is no time to go into any detail concerning the qualities of a healthy diet. The report of the Medical Research Committee for 1919 contains an account of the distribution of the vitamines, and from this a diet may be built up, but one eminently desirable is the following:—milk, eggs, butter, cheese, wholemeal bread, fresh fruit and green vegetables. In this diet meat is conspicuous by its absence, but meat is comparatively poor in vitamines, and is only useful in that it is a concentrated and easily assimilable nitrogenous food. Of course a food cannot be entirely rejected because it has no vitamine; for example, Pasteurised milk is better than milk containing virulent bacteria, but it should be observed that a requisite amount of the vitamines are taken as well.

It will be noticed that the above rich diet is one usually given to convalescents, and before concluding I should like to say that if it is a diet which will restore health it is surely one which will maintain health.

"Vitamines," by Sherman and Smith, a publication of the American Chemical Society, contains a splendid Bibliography.

Papers by Guy's Men.

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ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

TWO years ago, at Richmond, on the occasion of the Final of the Inter-Hospital "Rugger" Cup, one of the attractions, second only to the match itself, was a gentleman, presumably of Holy Orders, who maintained an air of dignified disapproval among the hilarious and motley crowd of students. Of the order of the Rev. Mr. Stiggins, it was evident that he considered the entire proceeding one big "vanity." One particular gesture of his has lived in our memory. The Guy's supporters, led by his reverence, were marching in procession round the field when they saw coming towards them a similar procession from Bart.'s, just as hilarious if more sedately garbed. On meeting them, the Rev. Mr. Stiggins threw up his hands in horror and turned away his eyes, aghast that there could be such creatures.

This amusing and good-humoured incident was merely a part of the annual meeting with our opponents at football and was enjoyed as much by the objects of Mr. Stiggins' scorn as by his friends, but there is, we think, apart from our games, a certain lack of Catholicity in the various schools of medicine. That this was so in the past was fully appreciated by the late William Osler, who implored his disciples to "escape from the besetting sin of the young physician, chauvinism, that intolerant attitude of mind, which brooks no regard for anything outside his own circle and his own school."

In 1906, in an article to the *Lancet* on "The Importance of Post-Graduate Study," he wrote as follows: "Post-graduate study is needed in all classes among us. The school for the young practitioner is a general practice in which the number and variety of cases will enable him at once to put his methods into daily use. A serious defect may warp his course from the outset. Our students study too much under one set of teachers. In English and American Schools they do not move about enough. At a tender age, four or five years give a man a local attachment to place and teachers which is very natural, very nice, but not always the best thing for him. He goes out with a strong bias already in his mind, and is ready to cry, 'I am of Guy's,' 'I am of Bart.'s,' or 'I am an Edinburgh man.' To escape from these local trammels, which may badly handicap a man by giving him an arrogant sense of superiority, often most manifest when there is least warrant, is very difficult. I knew three brothers, Edinburgh men, good fellows at heart and good practitioners, but for them the science and art of medicine

never extended beyond what their old teachers had taught. A Guy's man they could just endure, for the sake, as one of them said, of Bright, and Cooper and Addison, but for the men of other schools they entertained a supreme and really ludicrous contempt."

This spirit of intolerance is happily absent from our own Hospital, where we are always ready to listen to and, if convinced by it, to follow the teaching of other schools. The opportunities that come to must of us of visiting other centres of medical teaching, either British or foreign, are all too rare, but the many medical journals in the Wills Library are always available for those, who can find the time to read them, while very occasionally we are visited by eminent physicians and surgeons from other schools of learning.

We have had more than our fair share of fortune during the past three months, in that as a favour to two of their friends on the Staff, both Dr. William and Dr. Charles Mayo of Rochester, Minnesota, have lectured to us We have reason to believe that both were pleased by their reception, and the matter of both lectures was such as well to merit the applause, with which the lecturers were greeted at the close. On another page will be found Dr. William Mayo's lecture. If it is not exactly as it was spoken, and if in places the sense of the lecturer has been distorted, the fault must be attributed to want of expert knowledge in the Editorial Department, rather than to any lack of skill in our shorthand reporter, to whom it must have been no mean task. We regret very much that we have not yet been able to publish Dr. Charles Mayo's lecture, but as we felt that our reporter had not been able to make an exact report of what he said, we were compelled to send it to the States for his correction. It is hoped that in a short time in will be available for publication.

In spite of the decrease in the cost of living —and only the other day we heard a hawker in Snowsfields calling "cock sparrers penny a piece"—it is still a little difficult to make ends meet, and there must be few students, who could not put a few extra pounds to some useful purpose. Such pounds are within your grasp. By thinking, during one of those sudden flashes of genius, of some clear, arresting sentence to direct the wayward into the paths of health and sending it in to the judges of the "Health-First" Campaign Competition, you stand every chance of winning one of the generous prizes offered by the promoters of the competition and, what is of far greater value, of spreading the gospel of health in the dark places of the land. The scheme of postering the nation into health is so feasible and promises such beneficent results, that it should command the warmest support. In spite of the wonderful, though natural, patriotism that was displayed during the last war, who will deny that thousands had their minds finally made up to enlist in the Services or subscribe to the national funds by seeing coloured and illustrated posters on every hoarding, inviting them to "join the men at the front," or saying "turn your money into bullets." In the same way we look forward to a great improvement in everyday hygiene when the housewife, on rising and gazing from her window, sees staring her in the face the accusing words "Why is that window shut?" and the child, returning from school, willingly obeys the mandate "Throw away that toffee-apple." (Candour compels us to state that we do not support this last suggestion with great confidence.)

Great ideals merit great endeavours and we recommend the greatest support for this competition, which, as announced in our advertisement pages, closes on August 31st.

We offer our heartiest congratulations to Mr. E. T. Coneybeare, who at the last 1st M.B. examination obtained distinctions in both Physics and Biology. It is a long time since a Guy's man obtained so rare an achievement.

The results at the recent examinations reflect great credit on the present system of teaching in the medical school. In the 2nd M.B. (Part II.) London, 95 per cent. passed in Anatomy and 100 per cent. in Physiology. In the First Conjoint, 26 men qualified, 79 per cent. having passed in Midwifery, 68 per cent. in surgery, and 67 per cent. in Medicine.

Now to end on a sadder note. Students, whose subscriptions to the Clubs' Union became due in May last, are asked to forward them to the Medical School Office immediately, as the list of members is now being compiled and will be published at an early date.

Obituary.

JOHN W. HAYWARD.

We regret to announce the death, which took place at his residence in Oxford Street, Whitstable, at midnight on Sunday, of Dr. Hayward, who was one of the town's grand old men and who was universally respected.

Born at Hastingleigh eighty-three years ago—his parents belonged to an old Whitstable family—John W. Hayward was educated at Sutton Valence and was afterwards a pupil of his uncle, Dr. William Sankey, of Sutton Valance, and later studied at Guy's Hospital, where he had a distinguished career and held many appointments. In 1864 he went to Whitstable, where for close on half a century he enjoyed a large practice.

The Doctor's end came very suddenly because although he had a very serious illness, two or three months age he made a marvellous recovery and was out in his bath chair on Saturday.

Dr. Hayward leaves three daughters, to whom our sincerest sympathy is extended.

Notices.

Arrangements have been made for Students to visit the laboratories of Messrs. Parke, Davis & Co., Manufacturing Chemists, at Hounslow, on Tuesday, October 16th. All students desirous of attending are requested to forward their names to the Medical School Office, on or before, Monday, October 1st.

The Newland-Pedley Gold Medal for Operative Dentistry has been awarded to Mr. C. A. Wakeford. Mr. L. M. Cartwright has been awarded a Certificate.

Change of Address.

J. W. Meek, B.Sc., M.D., M.B., 92, Barrow Rd., Streatham Common, S.W.16.

P. L. Richardson, M.B., B.S., General Hospital, Tunbridge Wells.

E. P. Minett, M.D., D.P.H., D.T.M. & H., Government Bacteriological Institute, Hong Kong.

O. Marriott, M.D., B.S. (Lond.), M.R.C.P. (Lond.), 25, Devonshire Place, W.1.

J. R. Barrowclough, Crescent House, Upwell, Near Wisbech.

Dr. J. A. Ryle, 13, Wimpole Street, W.1. (Tel. Langham 1983.)

Specialities.

"COW AND GATE" MILK FOOD.

THE WEST SURREY CENTRAL DAIRY CO., LTD.,

Cow and Gate House, Guildford, Surrey.

One of the chief claims of "Cow and Gate" Milk Food is that it is a completely natural, and therefore perfectly balanced diet. It can be relied upon to build up bone and muscle in the right proportion to fat, and without any need for graduated changes.

"Cow and Gate" Milk Food is recommended by Doctors as a supplementary food for the mother during the preparation period.

The West Surrey Central Dairy Co., Ltd., will be pleased to send sample and full particulars to Medical Men on application.

Necrosis of the Jaw.

BY J. LEWIN PAYNE.

The word "necrosis" refers to the death of a part of the body as opposed to the whole, the latter condition being termed "somatic." This disease of the bone is equivalent to gangrene of the soft parts, and where the jaw is affected it is interesting to remember, that it was Sir Samuel Wilks, a former physician of Guy's Hospital, who, in the year 1846, first wrote of "Phossy Jaw," a disease that in days gone by, commonly occurred in those engaged in the

FIG. 1.

manufacture of "lucifer" matches. It was James Salter, a dental surgeon to Guy's, who first described a type of necrosis, which has been called exanthematous necrosis.

There are two main causes of the disease under consideration, namely, cases arising from (1) *Bacterial infection* and (2) *Chemical poisons*. And, at the present day, bacterial infection is the much more common cause, including as it does, cases arising after trauma, exanthematous necrosis; and those due to specific infection from such diseases as syphilis, tubercle and actinomycosis.

The chief chemical poisons associated with the disease are arsenic, mercury and phosphorous.

The subejct may be conveniently arranged into four groups, divided in accordance with the cause of the disease, namely:—

(1) Traumatism.

(2) The invasion of the bone by ordinary pyogenic organisms.

(3) Specific infections, namely, syphilis, tubercle and actinomycosis.

(4) Chemical poisons, *e.g.*, arsenic, mercury and and phosphorous.

In every instance the death of the bone is due to the cutting off of the blood supply.

Group 1.—When due to traumatism, cases commonly arise in connection with comminuted fractures of the jaw—during the late war, gun-shot wounds gave

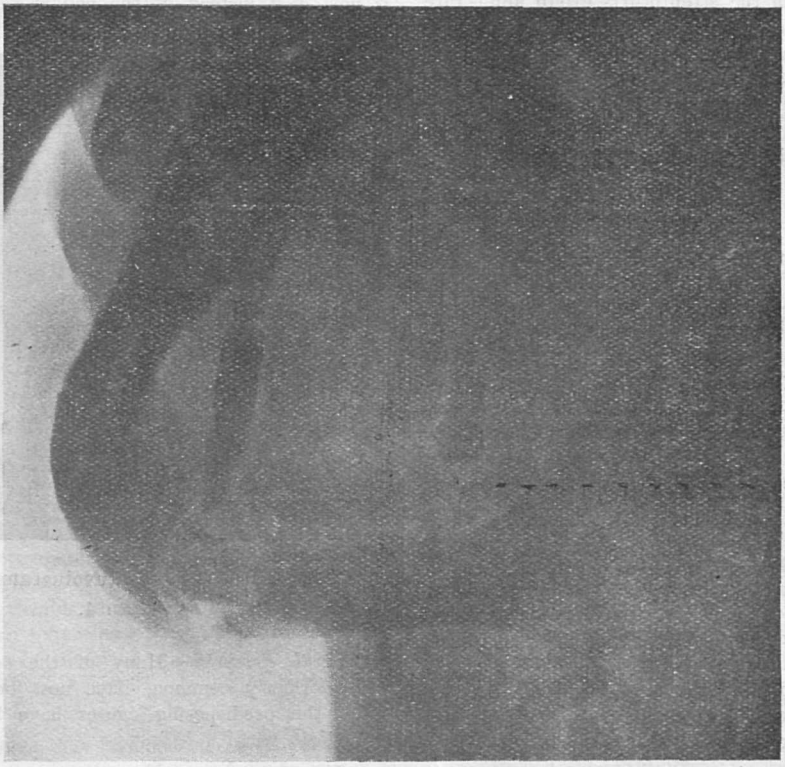
FIG. 2.

rise to such cases. Infection of the fractured surfaces easily occurs from the mouth, especially when the teeth are septic. Fig. 1 is a radiograph of a badly comminuted fracture of the mandible, in the region of the symphysis, and shows the condition in which the patient arrived from the front, with a "Hammond" splint *in situ*. Fig. 2 illustrates the condition of many such patients, a few days after receiving the gun-shot wound.

Group 2.—Infection, by pyogenic organisms, may be brought about by a dirty condition of the teeth, resulting in periodontitis, alveolar abscess, and necrosis, also from the gum, as in cases of simple stomatitis, gangrenous stomatitis, cancrum oris, and scurvy. And, sometimes, necrosis may arise as the result of sepsis of an impacted tooth, or from a socket after extraction.

Infection may come, via the blood stream, or may follow the injection of local anæsthetics into inflamed tissues.

Fig. 3 is the radiograph of a man, aged 46, with a history of alveolar abscess in connection with the left lower canine. Repeated discharges of pus occurred on the skin, beneath the jaw, and infection spread backwards to the molar region, leading to the separation of a piece of alveolar bone $2\frac{1}{4}$ inches long. The radiograph shows the infected bone, the separation of the sequestra and the involucrum, or sheath of new bone, which is being laid down. This case



Sequestrum.

Fig. 3.

was chiefly one of alveolar necrosis of the mandible, although a deeply-buried sequestrum, also, was found in the left canine region, where the original infection appears to have started.

Another case of interest, was that of a boy, aged $6\frac{1}{2}$ years, who first came to Guy's Hospital, rather more than a year ago, having had measles and broncho-pneumonia. The face was swollen, the jaw very tender, and there was suppuration at various points, between the left first lower molar and the deciduous central incisor teeth. The teeth having, successively, become loose, were extracted and various fragments of dead bone were removed from time to time, until, after persistent treatment the condition, ultimately, cleared up. The trouble started in an infected second deciduous molar. This is one of the cases, which was formerly described as exanthematous necrosis. Now-a-days we do not attribute this state to a specific effect of the fevers, but rather to the invasion of bacterial infection at a time when resistance has been lowered through the debilitated condition of the patient. During the acute stages of such exanthematous fevers as scarlet, measles, enteric, and small pox, the mouth is usually septic. Necrosis in these cases especially affects the alveolar margin of the bone.

Group 3.—Specific infection is most commonly due to syphilis, through lesions associated with the tertiary stage of the disease, which affect the maxillæ more frequently than the mandible.

Syphilis particularly attacks these bones, which are covered with mucous membrane on each side, and the mischief starts as a gummatous periostitis; whilst carious patches and some sclerosis may be found. The last condition may lead to compression of the arteries, and the cutting off of the blood is

completed by syphilitic endarteritis. Tertiary syphilis leaves a curious worm-eaten appearance in the bones affected.

Tubercular disease of the jaw is rare in dental practice. When the cranial bones are affected, the orbital margins and malar processes are the usual sites. Tubercle more often leads to caries of bone, with which there is very little pain. But Schlatter has described a number of cases of tubercular necrosis, commencing as hard swellings at the angle of the jaw.

Actinomycosis of the jaw is the result of infection from an organism of the streptothrix group, and is rare in man, but common in cattle, when, it is said to be be due to the eating of barley in which the ray fungus is present. The fungus may find its way through a cavity in a tooth or directly into the soft tissues, when an abscess develops around each nodule and necrosis may follow.

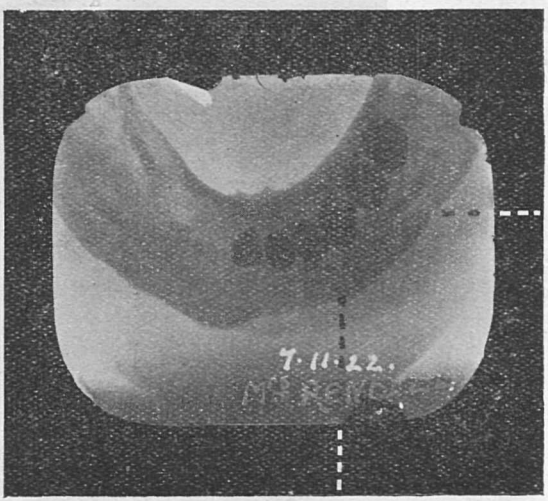
Necrosis may also occur in connection with a malignant growth of the jaw.

Group 4.—(a) *Arsenic.*—Necrosis may arise from arsenious acid, used to devitalise the dental pulp, which may escape on to the gum or through the apical foramen. Usually, only local necrosis occurs, but sometimes the condition becomes quite extensive. A case illustrating this, came under the care of the late Sir Henry Howse, the patient being a boy aged 9 years. Arsenious acid had been applied for the destruction of the pulp of the left lower first molar. The tooth became tender and loose and there was marked periostitis of the jaw. The molar having been extracted, the trouble spread towards the front of the mouth, and the left deciduous molars and canine were soon lost, and it became necessary to extract the lower incisors and to remove a considerable amount of dead bone. Suppuration extended as far as the first molar on the right side of the mandible, and most of the original bone, between the two molars, was lost by necrosis, but the boy ultimately recovered.

(b) *Mercury.*—Necrosis arising from this poison is, now, rarely seen. At one time, salivation was considered a necessary part of the treatment of syphilis with mercury, and, quite frequently, mercurial necrosis followed. The condition also arose during the manufacture of looking-glasses, when plates were converted into mirrors, by sliding and compressing them on to sheets, covered with mercury, but this method has been replaced by a chemical process.

A very rare case of mercurial necrosis was seen, some time ago, in the clinical room at Guy's Hospital, caused by the injection, by a quack, of metallic mercury through a hypodermic syringe. One of the early signs of mercurial poisoning is salivation, and with it, is noticed a metalic taste in the mouth.

Phosphorous.—As before mentioned, necrosis, arising from this poison, occurred, some thirty years ago and more, amongst those who worked in match factories. Even at the present day, it is not completely understood how the poison acts. It is the yellow phosphorous which produces the trouble, and the condition usually occurs in those who have been exposed to its fumes for a long time, and whose mouths are unhealthy. Some authorities say that the tubercle bacillus is the exciting cause. The sequestrum is characteristic, and is seen to be coated with a dirty grey deposit, like pumice-stone in appearance. Amorphus phosphorous is harmless, and is now used instead of the yellow variety.



Involucrum.

FIG. 4.

General Remarks.—Many of the conditions which were formerly common, have now become rare, because the predisposing causes have been recognised and dealt with.

Necrosis may be limited to a small fragment, such as sometimes occurs, after the extraction of a tooth, or it may involve the greater part of the jaw, as in some of the old cases, arising from phosphorous.

The mandible is more susceptible than the maxilla, because of its exposure to injury, its larger proportion of compact bone, the relatively small supply of blood, and, perhaps chiefly, because of the difficulty of drainage, when infection of the sockets occurs. These conditions also explain, why many cases of necrosis of the mandible are so extensive, for the living bone, nearest the dead bone, has to fight for its life, as well as to work, to cast off the sequestrum, which becomes merely a foreign body. This dead bone, or sequestrum, is hard, rough, porous,

light, and dull to the tap of a metal instrument. At first, it is white, but later becomes discoloured on exposure to the air or to decomposition.

In the capacity for repair after necrosis, there is considerable difference between the maxilla and the mandible, the former being slight, whereas in the case of the mandible the periosteum is very active in aiding the production of new bone, to take the place of that which has been lost by necrosis. This new bone is called the "involucrum," (Fig. 4), because it forms a sheath around the sequestrum, and it is pierced by a number of holes called "cloacæ," which allow the pus around the dead bone to escape on to the surface.

Treatment.—The first principle is to remove the cause, where it is possible so to do, and to use the special remedies indicated for specific cases. Then, make free incisions down to the bone, preferably within the mouth, but if the lower border of the jaw is involved, an external incision would be more effectual. There may be danger in attempting to save the skin, especially in those cases where the sequestrum includes a portion of the bone below the apices of the teeth.

The use of hot antiseptic lotions, such as eusol, boracic acid, potassium permanganate will be of value.

When cloacæ are established, syringe these sinuses frequently. The basis of treatment is to obtain good drainage and irrigation.

There must be no hesitation in extracting loose and septic teeth.

Postpone the operation of removal of dead bone, until the sequestrum is quite separated. Meddlesome treatment aggravates the inflammatory process, and, often causes an extension of the mischief beyond the limits previously involved, and, also, arrests the formative periostitis, which leads to the rebuilding of the bone.

When the bone has commenced to sequestrate, the use of 5 per cent. lactic acid may help to hasten the separation.

Tobacco and alcohol should be avoided.

The patient must be fed on nourishing food. Aperients and tonics, such as iron and quinine, may be administered, and potassium iodide, in small doses, has been found helpful in clearing up many cases, in addition to those which are definitely of syphilitic origin.

Appointment.

W. Johnson, M.D., M.R.C.P., Physician to The Royal Southern Hospital, Liverpool. Lecturer on Clinical Medical Anatomy and Lecturer on Clinical Medicine, University of Liverpool.

Guy's Hospital Medical School.

Final Fellowship Course.

AUGUST TO NOVEMBER, 1923.

WEEKLY PROGRAMME.

Commencing Wednesday, August 29th, when the Clinical Tutor will meet men taking the Course, in the Clinical Theatre, at 11 a.m.

MONDAY—
10 to 12.—Clinical Tutor, Short cases in Wards.
12 to 1.—Mr. Bromley, Operative Surgery.

TUESDAY—
9.30 to 11.—Mr. Trethowan, Surgery of Bones, Nerves, Joints and Locomotor System.
11 to 12.—Mr. Davies-Colley, Surgical Pathology.
12 to 1.—Mr. Turner, Clinical Lecture and Demonstration.

WEDNESDAY—
10 to 11 and
12 to 1.—Clinical Lectures or Demonstrations on special Subjects by the gentlemen mentioned below.
11 to 12.—Mr. Davies-Colley, Surgical Pathology.

THURSDAY—
10 to 12.—Clinical Tutor, Short cases in Wards.
12 to 1.—Mr. Bromley, Operative Surgery.

FRIDAY—
10 to 12.—Mr. Rowlands, Clinical Lecture and Demonstration.
12 to 1.—Professor Johnston, Surgical Applied Anatomy.

SATURDAY—
10 to 1.—Lectures or Demonstrations on Special Subjects, Papers, or Visits to Hospitals.

The Special subjects contemplated are:—
Mr. Bromley and Dr. Symonds.—Neurological.
Mr. Mollison.—Ears.
Mr. Eason.—Eyes.
Dr. Hurst.—Ætiology of Gastric and Intestinal conditions.
Mr. Bellingham Smith.—Gynæcological.
Prof. Eyre.—Bacteriological.
Mr. Hughes and Mr. Fry.—Jaws and Palate.
Mr. Todd.—Splints.
Dr. Ryffel.—Chemical Investigations.

The Class will meet daily at 10 a.m., in the Clinical Theatre. A detailed programme for the week will be posted in the Colonnade.

In the last few days, or between the papers and the vivas, there will also be arranged:—
Show of Instruments by Down Bros.
Demonstration of Films and Type Cultures of the main Bacteria.
Practice Vivas on Slides and Preparations bearing on Surgical Pathology.
Practice Vivas on Short Cases.

In addition to the above, visits will be arranged to Special Surgical Hospitals.

Gentlemen taking the Course will be permitted to attend Operations, Out-Patients, Teaching Rounds, and the General Surgical Practice of the Hospital.

The Relation of Physics to Surgery.

A LECTURE BY DR. WILLIAM J. MAYO
(of the Rochester Clinic, U.S.A.)

Gentlemen,—

It is indeed a very great pleasure to come to Guy's. I have been here many times, and always with added enthusiasm and improved knowledge. A few minutes ago, I walked into the Treasurer's building, that I might again look upon the portraits of the eminent men whose work belongs to the scientific work of the world, and is the pride of English-speaking people. When we consider Addison's work, which the surgeon has invaded, perhaps, in pernicious anæmia, or in attempts to understand the suprarenal gland, so beautifully given in that original contribution, in so few pages, which so clearly state all that we know about it to-day; and Hodgkin, again, whose work was about as well known in his time as it is to-day, because we are still beclouded and befogged as to just what the relation to Hodgkin's disease to sarcoma is, these are remarkable memories. And again the surgeon invades this field. Then in regard to Richard Bright: to think that, after all these years (his original communications were in 1828 and in 1838), that after almost 70 years we have been led off in various directions, only to come back to-day, more nearly than ever, to Bright's original views. And to think, too, that this work of Bright's was done with a tablespoon and candle!

Then Samuel Wilks; I was glad to see his portrait again, because that reminds us of sound knowledge of the relation of the anatomical parts of the brain to the normal and aberrant function of the brain. So many of these men I need not mention, because you know about them better than I do.

And it leads to this thought, one that is very dear to my heart and that of most people in the United States, and which was brought out so clearly by the war: that there is something about the English-speaking people that is different from others; that we stand for character, and what is here called "good sportsmanship," and what we in America call "the square deal." This was something which was brought out very clearly in the war, and which other races do not possess to anything like the same degree. You have the same ideas that we have in regard to the important elements of character. And I would call your attention to the fact that now, since the war has made this picture so clear that he who runs may read, there never was a time when the English-speaking people could come together, so far as the United States is concerned, as at the present. We have 112 million people, of whom 42 per cent. are direct descendants of the subjects of Great Britain, and 25 per cent. more of the Nordic races, who are so closely allied, so that 70 per cent. at the least of our people are turning towards British ideals, that is, more than ever before.

In choosing a subject on which to address you to-day, I am going to take up something to show you what we are thinking of in the States. When we think of the great contributions of Charles Darwin and Wallace and those other men who have taught us through the natural sciences, and what has come out of chemistry, we realise how important they are. And now we are turning towards physics and bio-physics.

In approaching a subject of this sort, to get a proper view-point it might be well to quote from Patrick Henry, who said that our knowledge of the future could only be based on our experiences in the past. The ordinary clairvoyant cares little about the past; to them it is a question of the future. And it is so much easier for a clairvoyant, or a palmist, to tell you about the future correctly than it is to tell you about the past. I was struck by this very much once when talking to a very witty Irish surgeon, who was visiting us. He said to me "Dr. Mayo, I see you have a palmist here." I said, "Is that true?" He said "Yes, and they are great people. Shortly before I left Dublin there came a woman from Paris, and she was wonderful!" I said "Did you see her?" "No, I didn't, but a friend of mine did." I said "Did she tell him correctly as to the future?" "Yes, but of the past, No." Now, if we are going to look into the future, with any accuracy of prognostication, we must base our efforts on the past.

What I am going to speak of to-day is related not so much to facts as for the purpose of securing a view-point. The elder Gross, who was one of the greatest surgeons of his day, and the greatest American surgeon, I

can just remember seeing, when I was a medical student; while commenting on abdominal surgery, he told us that he did not believe the time would ever come when the abdomen would be opened to the benefit of the patient; and that while there might be such instances, it was fated, in the long run, to end in disaster.

If we are going to follow Patrick Henry's advice, we must review, for a few minutes, the work of Aristotle. You will remember he was Physician to Alexander the Great, who, about 350 odd years before the Christian Era, was the first one to investigate and develop facts. It was a wonderful thing that he did in that day of mysticism, to investigate what are the facts. And, 1,500 years later, Bacon based on those facts the idea of research. That is, if one took the facts derived from medicine and the natural sciences, and then attempted to prognosticate from those facts, one could so dive into the future that one could get a glimpse of what could be done. In other words, Bacon spoke in terms of the submarine and the aeroplane hundreds of years before such things became possible. So if we investigate the facts, we readily see why modern medicine began with John Hunter. You have heard so much about John Hunter, that I shall do no more than say he was the beginning of modern medicine, because he studied with the eye directly, and with very inferior microscopes, pathology as a whole. And to you young men is the wonderful opportunity of going over to the Royal College of Surgeon's Museum and seeing those 11,000 specimens, numbered in black by Hunter's own hands. And do not forget his brother, William Hunter, the physiologist, because his work is only beginning to be thoroughly appreciated to-day. As a result of Hunter's work, we find, in the earlier half of the last century—beginning about 1830 and extending to about 1880—that the French took the lead; and they did it because they were studying surgical anatomy, and as to how the great things which Hunter had shown to exist could be used. And we owe largely to the French school of Surgical Anatomists technique, and especially improvements in the microscope, which enabled Pasteur to do his wonderful work, and which Joseph Lister converted to surgical purposes.

And, again, we must not forget Virchow, working with the microscope. It seems almost incredible that Virchow, dead less than twenty years, should have been the creator of what was known as the cell pathology or the cellular theory.

And so, as we come to modern times, we find it is the eye which has exposed things in the cavities of the body. How little we knew, because the *post-mortem* experiment showed certain conditions, and then an attempt was made to reason from these *post-mortem* conditions into the clinical conditon of the patient during life. And then we found out, after all those years of patient study, that the *post-mortem* room findings were the foundation of medicine, but not the edifice; because the patient, as Sir Berkeley Moynihan said, seldom dies from the chronic disease that he has been suffering from during life, but from some terminal condition; and at the time that the patient's clinical history was worked up, he did not have the things he died from, and which obscured everything *post-mortem*.

Therefore this brought us to the conception of living processes, and the enquiry changed from the abdominal cavity to the thorax, and into the skull. And we got the improvements from this which you know about; always from the eye, the eye aided by the microscope.

And then we came to that wonderful improvement, the X-ray, due to the efforts of Sir William Crookes, the greatest and the last of the great all-round physicists. And in the States we have the idea that it came entirely from England. Science has no country, and no one is more free than we to give to Roentgen that which belongs to Roentgen. If you read Sir William Crookes you find it was desired to create a vacuum in a glass tube; he then made the electrical attachments, and when he introduced what he called the Kathode ray, he found he had come to a point where matter and energy could not be separated. It was found that these kathode rays went in a straight line always, unless they were in a magnetic field, and if they came into contact with a solid body they threw a shadow. You will find it mentioned in Kay's work on the X-ray that Crookes wrote that he understood Roentgen was doing some marvellous things, and asking how he was doing them, and the reply—also published, I think, on the fly-leaf was that he was working with a Crookes tube. Did he ever mention Crookes again? Not to my knowledge. The work Roentgen did was to make this thing practicable. It was a wonderful work, because he made the X-rays to

us another method whereby with the eye we could see what we wanted to do.

Perhaps I have said enough to show the overshadowing importance of the eye in our profession. In the operating room of another surgeon, none too well known in the States, who has a small class of students because the work he does is not compulsory—they are extra-mural lectures—he has, facing his students, two great big eyes. And further back he has, relatively small, two hands. Then he has two ears, represented so small that you can scarcely see them; then a tiny nose, then the tongue. This is to show the relative importance of the five senses. I attended by accident, some 35 years ago, a party where there were children. The children would blindfold one of their number, then one would strike two coins together near the side of the head, and though only 18 inches away, the child could not tell from what direction the sound came. It was extraordinary to see what was done, and then the attempts to locate it afterwards. And I did little better when I tried it myself. The ear essentially does not locate.

Take another instance, the spleen. I took scores of cases and outlined the spleen, then I opened the abdomen for other conditions, and while it was open I examined the spleen; and scarcely ever did I get it really right. If I knew, in certain diseases, it was going to be enlarged, then by educated imagination I could get somewhere near, not really because I had been able to outline it so accurately, as shown by the chalk marks I put on, but because I knew, in a particular disease, about where it ought to be, and what would be its probable size.

Let us grant, then, we get our advances from the eye; that everything we have which is of real importance has come from the eye. Now, with the eye, about where can we get? This goes into optics. I shall put the figures I shall mention into inches, because I take it that you, like us, are of the older school, and the States still think in inches and feet, whereas we ought to have the decimal system. A body 1/250,000th of an inch is the smallest thing we can see with the microscope, and that under the very best conditions. Let us take that as the extreme on one side. Then let us go down to the atom and the molecule and the electron at the other end, which are too small to be seen. It is true that Thomson and Ashford have been able, with the X-ray, to see the positive nucleus or core of the atom, and in a moment I want to speak a little further about that. We have on one side those things which can be seen by the eye, directly by the eye or indirectly by the aid of the microscope, all of which are affected by gravity. On the other side, as I say, we come to the group of the atom, the molecule, the electron, which cannot be seen, either directly or indirectly, except under experimental circumstances; and they are not affected by gravity. This is extremely important. Moore, a Danish scientist and physicist, shows that the atom is like a Solar system; thus we have the sun in the centre, which is the positive element, and we have around it, electrons in rapid motion. The smallest is the atom of hydrogen, which is about the size of a positive charge. The number of charges on the core of the atom, the number of electrons revolving round it, gives it its force. The electron is the beginning. We do not know much about positive electricity; you cannot develop it; it is the electrical centre of gravity. The electron is about 1/1,800th of the density, and about 1/35,000th of the size of the hydrogen atom or the positive charge. Rutherford, now Vice-President of the Royal Society, says that eventually we will get our power and energy and heat from atomic energy. Steinmetz, one of the greatest physicists, says there is enough energy in a teaspoonful of water to run the largest battleship across the ocean, and that in a single gramme of radium sufficient power is given off during its lifetime to lift a battle fleet 300 feet in the air, and to maintain it there for a week or two—I have forgotten the exact time.

What I want to call your attention to is that these things apply and obtain power that moves the world; and the power we get comes by heat, it is not affected by gravity. But we cannot see these things which lie in a big field between the 1/250,000th of an inch, or one-tenth of a micron, and the 1/1,000th of a micron. And in this we have what is known as colloid; the name means nothing but its size. We have moved down from the microscope, we are concerned now with a field which can be detected with the ultra-microscope, and we see that this field has been invaded by industry, by animal husbandry, by agriculture, and yet has been almost completely ignored by medicine. Here we have an opportunity to carry the eye down to this field.

whose revelations will be as great for you, gentlemen, as the revelations of the microscope and the work of Pasteur, and all those things have been for former generations. It was Brown, the physiologist, working, I think, in Bristol, at all events here in England, who first, in 1827, pointed out something which must have been noted by man from immemorial time —that if you went into a dark room and let in a pencil of light, you saw some specks floating about; they were called motes, and the movements were given the name "Brownian movements." Dalton was then doing his great work on the atomic theory and the constitution of the atom, and at about the same time the molecular idea took hold of the public. And the Brownian movement, which Brown had noticed, not only in the air, but under the microscope, when examining certain liquids, was called the dance of the molecules. It was not until 1861, through the work of Thomas Graham in the London Mint, that it was known what constituted colloid. He worked by dialysis, using parchment paper. I shall not go into the calculations now; what I want to give you is the view-point as to how we are looking at things in the States. With the naked eye, by means of the electro-magnetic vibration which we speak of as light rays, Brown saw colloids in the air about 1/30,000th of an inch, and with the ultra-microscope we can go down to the 1/25,000,000th of an inch, or the 1/1,000th of a micron, and I have told you that this group, when you get into the smaller sizes, is not affected by gravity.

Why did we see them, and how did we see them? What Brown saw was that there was something floating in the air which was larger than a ray of light, that what we saw was a scattering of the electro-magnetic vibrations or light ray which struck this, and it acted as a mirror; so we saw there was something there. There has been much done since that time of the utmost value. The smallest electro-magnetic vibration is that from radium, which is about one-billionth of an inch. Ten times as large as that is the X-ray. But even experimentally they have not been able to get the Gamma ray so that they could make it scatter. When they do that they will be able to see the atom. What you see with the ultra-microscope is not the object itself, but only the reflection; you do not get the size, or shape, or condition of the object. But with the X-ray they have been able, largely as a result of the work of Moseley, a young Englishman who died in Gallipoli at the age of 28, a great loss to the scientific world. Moseley showed there could be only 92 elements, of which 88 are now known. And he did that because he could go to the hundred-billionth of an inch to see things which could scatter light to that point. To go down to that extent is only a question of time.

This means that we are opening up again the opportunity for the eye to advance science. With the larger sizes there is some effect of gravity, though Oswald, in his work, says the time it takes a colloid solution to settle is in millions of years.

Let us take some concrete examples. I have given you almost too much on this question of size, but I want you to get the idea in your minds.

The first of the special cranial senses was that of taste, that the mouth might reject things which were not food. Then came the sense of smell, that the primitive ostium might be turned towards the food. And ears were put into the head because of the danger that threatened from behind or the sides. Then, from the anterior lobes of the brain, came the eye. The eye is connected by pathways with the reasoning and thinking part of the brain. To most men, memory is visualisation: we see things again with our mind's eye.

Let us take water as an instance. There is a new controversy on what constitutes water. Chemically we always thought we knew; but now they do not agree. Let us take water from the physical side. You put a dish of water in the sun on a hot day, and it passes into the air; it is dispersed in a molecular state. But when it gets to where there is a difference in atmosphere and compression, then instead of being widely scattered, it begins to come together as clouds. For a single acre of ground, if it is going to rain an inch you must have 100 tons of rain fall, water which is not affected by gravity in the cloud. The water comes together as rain, and if it comes quickly down, the atomic or molecular energy of the water is given off as thunder and lightning. As you know, water is one of the most incompressible substances. Yet when water in a film on the molecule compresses itself to $\frac{3}{4}$, that is to say, 75 per cent., it loses its so-called watery characteristics, and it is not evaporated or changed by even a temperature of

300 degrees. What has happened? It means we have here got water in a new form; we can have it not only as we usually know it, but in a bound form. See how beautifully they have worked this out in animal husbandry and in agriculture. Gotson, one of my colleagues in the University of Minnesota, lives where it is necessary to know what plants will freeze, and what plants will not; and we have, from our State, been traversing various parts of the world of the same climatic conditions, to find out what things we can rear and raise. And we have a country where there is drought, and they have studied conditions in other countries where there is drought, Africa, for instance. He found where you have to try the thing out, for if you raise the plant to, say, 6 inches, and then put it in a press and squeeze it, and if you can squeeze the juice out it will freeze, but if you can not squeeze the juice out it will not freeze. We know the plants which would not be lost by drought would be those which have no juice, though animals can extract juice from them.

Let us return for a moment to the field which Richard Bright opened up here in Guy's. We find that the kidney is not a secreting organ in itself, but that it is a filtering organ, and that it filters various things. And we know that when the kidney fails, it fails as a filter. Take glomerular nephritis; what fails there? The water goes through, the cells go through. What does not go through as it should is the urea. Why? Because it is not molecular; it is a colloid, when the kidney is in a certain state, it is a little too large to go through, even though it is very small. So here you have a failure of urea to pass through it because of a little change in the glomeruli; the cells are then made a little too small for the urea to pass through. If the whole kidney is affected, we call it glomerular nephritis, because it is too small to allow even molecules through, and then there is œdema, salt-retention, and things of that sort.

I give you that as a little example of the methods of thought as to how we can expect to move in regard to these patients.

Take the question of sugar—diabetes—on which so much has been done; it brings you into the field of physics. Sir William Bayliss says that chemistry and physics can no longer be separated, because chemistry depends upon the physical state. A most marvellous piece of work has been done by Krogh of Copenhagen. He took motion-pictures—cinema pictures, I think you call them in this country—of the circulation of the blood in the capillaries, just as Sir Arthur Keith, of the Royal College of Surgeons, has done in his splendid and suggestive work on the non-striated muscular fibres. He was able to show that even the thinnest capillaries had a non-striated muscular system. After some little time, Krogh demonstrated his ideas, which gave him the Nobel Prize in 1920. He showed that in the systole of the heart there is just enough distension of the arterial part of the capillary to let out their crystalloids, because they are molecular, and the amino-acids from proteins because they are molecular, and water, and oxygen; but not colloids. And when you get to larger and larger veins, the colloids pass. We found in the war that if a man had crushed legs and other muscles, that if a tourniquet was put on at once he did not have shock, but he had shock when it was taken off. The common kind, operative, surgical shock, is due to the development of histamine; histamine comes from crushed muscle It dilates the vessel, so that the openings are large enough to permit colloids to pass through, and this causes shock. You can give histamine and produce shock, because by it you paralyse the muscles of the capillaries; it opens up the spaces, so that out go your colloids, and the man bleeds to death in his own tissues; not bleeding blood, because the corpuscles are too large to come out, but colloids.

I shall not go further into this very interesting subject; one might continue on it almost indefinitely. I would carry you through the spleen, which is a coarse filter, and filters bigger things, like bacteria. We can trace bacteria through the Berkefelt filter, we know they must pass through; and now we shall see them with the ultra-microscope, and shall see they scatter a ray of light.

I shall not go into the work of Vermilius, the Swedish scientist, which shows what solution means; it all dovetails into what I have said above. It does mean, however, that if we take the view of the past and follow Patrick Henry's remark that we can only see the future by our experience in the past, we shall find that the pathway of knowledge lies largely in optics, the eye, because it leads to all parts of the brain. Certain substances are poisons not because they are chemical poisons or destroy blood, or anything of that kind, but because they are fed into the blood in sufficient size, that where they are needed in the form of molecules, so to speak, if they take the

colloid form they plug the openings, and we call that failure of internal respiration.

It is a wonderful field; it is a field of knowledge of which we are on the threshold. And in the States we are in a frame of mind in which we believe that almost anything can come by a further study of bio-physics.

In reply to a vote of thanks Dr. Mayo said —We have, in Chicago, which is a great, big, dirty city of about three million people, a street which is said to be the longest in the world, called Halstead Street. I think it is about 27 miles long; perhaps it is a short street compared with some in London. And on this street we have a great many common people living. One day there came into the clinic for me to examine a very curious looking woman. She had a tumour, and it looked as if it was inoperable. She said she had no friends, and no way of living unless she could work. She was a strange creature, deformed, but she had been fixed up so as to look somewhat straight. I operated upon her, and I am glad to say she went out well. Before she went she shook hands with me and said, "Dr. Mayo, I don't suppose you have much faith in fortune-telling." I told her, "No, but I didn't know anything about it." She said, "I am a dreamer of true dreams. For instance, a woman comes to me and says her husband is a drunkard and is not properly supporting his family. Then I read her her fortune, telling her her husband will do better. Then I go to the Municipal Judge and tell him about this man; and he does do better. Then a woman comes to me and tells me her child is playing around on the street and she cannot get him to go to school; she is in terrible distress, and does not know what to do. I read her his fortune, telling her he will do better. Then I go to the Children's Officer and report the case to him, and he does do better." Gentlemen, it is up to you to make my dream come true.

Extract from *The Times*, Monday, July 9th, 1923.

University News.

CAMBRIDGE, JULY 7TH.

C. C. Worster-Drought, M.A., M.D., of Downing College, has been elected to the E. G. Fearnside's Scholarship for the encouragement of clinical research among the organic diseases of the nervous system.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Causes of Chlorosis.

SIR,—I read Dr. J. M. H. Campbell's Study of Chlorosis, in the "Guy's Hospital Reports," with extreme interest, and from a hospital and general practice extending over some thirty years I can corroberate the incidence which he proves by statistics collected from accurate sources. Speaking from clear memory I should say that quite half the girls above puberty attending "Out-Patients" at the Assistant Physician's Department in my day were suffering from this disease. The percentage might be higher and it would be interesting to search the records and see if my memory serves me correctly. The Clerks who selected the cases for the Assistant Physician left these over for the A.H.P., and so we got most of them.

When I started practice here, some 28 years ago, most of my patients of the domestic servant class were chlorotics and the rest, I was going to say, were dyspeptics, but this while generally true, is hardly accurate. Nor was the disease confined to them, as I had innumerable patients of the shop and upper middle class. I had stocks of Blaud's Pills and combinations, Iron Jelloids and their combinations. I am still *overstocked* with these, as this form of anæmia disappeared at about the time, speaking from memory, that Dr. Campbell indicates.

When the Insurance Act came in a drop had taken place, and the cases subsequently disappeared almost to a vanishing point. During the war I took a large Out-Patient Department at the Croydon Hospital and the chlorosis cases were few. The worst cases I clearly remember were in flower seller girls, of whom I had a large clientele. Note, in passing, that these cling to the older fashion in dress, that in vogue with the coster class.

With regard to "gastric ulcer" in girls, I have not seen a case for years, though my panel has kept steady, 600—700, since the passing of the Act. These cases were common when I started practice, and I had several, some very alarming, every year. They decreased as chlorosis decreased and now, as far as I am concerned, have disappeared entirely.

It is my firm belief that the corset alone was responsible for chlorosis, the attendant gastric ulcer, and to a large extent for the constipation. With regard to the latter, my panel experience shows that this has decreased equally as chlorosis has done. Years back most young women were constipated, sometimes, and not infrequently, only "going" two or three times a week. This is the exception at the present day, and the cases of constipation I now

meet with in young women is only "missing a day." The paraffin and cascara habits acquired during the period we are dealing with is of course a factor in the cure, but speaking broadly I should say that the modern young woman is now no more constipated than the corresponding male.

When I started practice, it would be no exaggeration to say that all my patients of the servant class were tight laced, or if not actually so, wore corsets firmly holding the lower thorax and abdomen. I have frequently seen an expansion of 2 or 3 inches take place when the corsets were loosened round the waist. They practically never came to, naturally. This habit rendered exercise of any sort a burden and prevented them enjoying walking, or going about out of doors. Games among the better class were difficult or impossible. The pressure on the abdomen led to constipation and the "fæcal anæmia," Sir Andrew Clark used to talk and write about.

I am not a fashion expert, but would observe that our fashions, nominally Parisian, really come from the United States, and this applies to men's fashions likewise. It would, if my contention holds, account for Dr. Campbell's American statistics. I do not know Sweden, but would hazard the suggestion that the national costume (tight corsetted) has been abandoned as elsewhere for the factory-made fashionable garments. Why women who had pinched their bodies during the centuries almost suddenly emancipated themselves is a curious psychological problem, certainly they followed the fashion and not doctors' advice which had long in vain preceded the reform.—Yours faithfully,

A. PERCY ALLAN.

Croydon.
10th August, 1923.

The Experiences of an Extern.

Among those of you who read this—there are thousands clambering for copies—there will be some for whom the office of extern is completed, some for whom in the near future it is inevitable, and yet some for whom in the distant future it is perhaps threatened merely. To those of you who have been externs my advice is to turn quickly these pages, for it can only be a waste of your time to read an article that is incompetent upon a subject in which you are already experts. Inverting the right sequence of events is invariably stupid as is exemplified in the case of a gentleman I knew who failed in his "finals" because he occupied his time in reading a very elementary book on Physiology *after* passing the London examination in that subject; and may be occasionally even dangerous as is amply testified to by the fate of that misguided Egyptian, Cleopatra, who, in spite of what all the historians say to the contrary, did as a matter of fact *take before shaking* and died during the last tablespoonful from an overdose of arsenic. Beware!

Beware also you who are yet to be externs, and, before it is too late, tear out these pages. Only a little while longer will the rosy-fingered future stand tiptoe for you upon the mountains in the west. It would be a pity for me to hasten the inevitable coming of the storm-clouds. Read not, therefore, lest disillusionment and a great fear come upon you before you are prepared, and drive you hence, your course unfinished, to pursue some such irresponsible trade as politics or journalism. You can this once, not only with impunity, but with great advantage, break your most excellent resolve to read from cover to cover via each several page the fortnightly outpourings of hospital ink, and gathering up the appropriate impedimenta go to your cricket and your tennis.

And now to that vast regiment of those who, because they follow different professions, would never in the ordinary course of events become externs, I address myself. Refrain. For your little knowledge can but blind you to the horrors, and magnify unduly the glamour, the adventure and the strange delights of that which you are missing. Reading you might, nay, undoubtedly *would*, throw up all that you have gained and begin the study of this science. Refrain, for I do not desire to be instrumental in your suicide.

And now that I have sent them all packing, treading on each other's heels to be gone, two alone remain who read. But wait a minute. Mr. Censor you too may be off. The readers have departed and your censoring is in vain. The Editor read this before you began, and, if there be anything herein to blast a reader's soul, his soul is already blasted—nothing you can do would save him. It would be folly, moreover, to risk your own soul in a job that must needs be futile. Farewell.

At last, Mr. Editor, we are alone. I must explain: I must apologise. When a few evenings ago after dinner (I lay no emphasis on that preposition) you asked me to write upon this delicate and difficult subject and I accepted, I did not realise my folly, did, in fact, most outrageously underestimate the magnitude of the task I had embarked upon. Next morning I realised. What could I do? For a week I did not sleep. Then suddenly this morning, as I was falling headlong down the three steps from my bedroom to the bathroom, I conceived an idea; a downright low, deceitful idea—a mere subterfuge, I am afraid. I would write the article. I would lay

aside all scruples, all considerations of delicacy; I would pile it on thick. But first I would get rid of your readers. The more humble among them I would terrify with horrible warnings; the great ones I would pat on the back and after stuffing into their heads ideas of their own greatness impress upon them the iniquity of wasting their time in reading this very humble rubbish. For, sir, there is no snare more infallible in catching a man, how great soever, than one which panders to his vanity! With them departed I had thought that I could face you alone. But alas! once more my courage fails. It is not you, Mr. Editor, that terrifies me so much as the coldness of print itself. Were I to produce a book in the knowledge that its publication would be limited to a single copy, that that copy would be placed by my own hand in a leaden casket thrice sealed and buried never so deep in the ground, still should I be unable to write one tithe of that which is in my mind. Forgive me, sir. After all I have written you a title in keeping with my promise, and beneath it I have placed many words which nobody will read and from which, therefore, nobody will guess that I have deceived.

Another time, and privately, I shall tell you of all those things of which I intended (honestly) herein to write. Of the extraordinary number of antimacassars, of chair-covers, of table-cloths, of bed-curtains, of window-curtains, of doilies for clocks, of doilies for books, of doilies for flower-pots, of doilies for ornaments, and all other manner of crockery, which together may be included under the heading "Superfluous Ornamental Drapery"—of the extraordinary number of these things to be found in the houses of Southwark and Bermondsey. Of the terrible, hidden dangers these things hold for the extern, although their owners are blest (by the mercy of God) with a congenital immunity therefrom. Of the indescribable yet most certainly divine beauty which that rare object the completely naked and unclothed chair has for the extern. Of those cards labelled "In Memoriam" (to be followed by the Genitive) and inset among angels in silver and sunbeams in brighter silver, without which none of these houses may be considered blessed. Of a great many other things. And lastly of the sunrise in Bermondsey. Those who have stood upon the distant mountains in the cold of a summer's dawn and seen the sun come up out of the mists which are upon the plains below; those who have stood in the valleys which are between the mountains and beheld the western peaks grow pink against the sky; those who upon the flat banks of some river in the west have watched the mist rise up towards the sun until overflowing upon the fields it has left but the tree-tops like islands floating in a sea; in the eyes of those, I say, the sunrise never shone with so glorious a light as it does in the eyes of one, who emerging after an all-night vigil from some hot, dark cellar, looks for the first time upon the dawn in Bermondsey.

R. L. WATERFIELD.

Pass List.

University of London.
1st Examination.

July, 1923.

S. I. Abrahams.
V. M. Allom.
C. Arkles.
I. Bakhsh.
J. H. Barendt.
G. C. Campbell.
*†E. T. Conybeare.
S. J. M. De Nevasquez.
P. M. Deville.
D. E. Dunnill.
R. E. Fossey.
R. L Harward.
G. Mc. I. Housden.
R. A. Leader.
W. S. McConnell.
J. R. J. Macnamara.
J. E. Morton.
G. V. R. Mostert.
N. E. Pitt.
O. Plowright.
J. R. Rickett.
T. G. Scott.
E. C. Till.
R. S. Twigg.
J. A. Vernon.
C. G. Walmsley.

*Distinction in Biology.
†Distinction in Physics.

L.D.S.
Preliminary Science Examination.

July, 1923.

†F. H. Channon.
G. R. Pidgeon.
G. J. C. Sem.
M. J. O'Donnell.
I. E. Brown.
†H. F. J. Willis.
*C. Hofman.
†E. B. Corry.
*W. F. Fuller.
H. M. Norman.
*W. H. Naylor.
*C. Skinner.

*Chemistry only. †Physics only.

Conjoint Board.
1st Examination.

July, 1923.

Chemistry and Physics.

R. G. Sowter.
L. B. Langmead.
*J. H. de Jager.
†G. J. Hollis.
†W. G. Stanford.
W. P. R. Swemmer.

*Chemistry only. †Physics only.

Biology.

G. E. King-Turner.
R. S. Thomas.
J. W. Ellis.
W. G. Stanford.
A. M.Ewen.
G. W. Oliphant.
C. Arkles.
W. V. Beach.
K. H. Wright.
T. H. Felton.
W. P. R. Swemmer.
M. Gerson.
R. H. Hancock.
W. E. Herbert.
S. E. Knowles.
H. S. Marks.

2nd Examination.

July, 1923.

Part I.

Anatomy and Physiology.

H. W. Lewis-Philipps.
J. W. Schabort.
H. L. Belcher.
W. G. Porter.
A. R. Marsh.
V. V. H. Ho-akai.
R. Evans.

Part II.

Pharmacology and Materia Medica.

J. W. Schabort.
A. S. M. Douglas.
G. T Hankey
T. St. J. H. Silvester.
W. H. Dowell.
D. W. E. Lloyd.

Final Examination.

July, 1923.

Medicine.

M. Myers.
I. E. Harries.
F. N. Newell-Roberts.
R. D. Gross.
J. J. Lewinstein.
*L. G. Housden.
*E. Wornum.
*H. Evans.
G. O. Mitchell.
R. B. Fawkes.
J. C. Hewetson.
*M. Honigsberger.
*R. G. Tame.
*A. Gordon.
A. Broido.
*H. D. Wyse.
H. B. Flooks.
*G. C. Millis.
*W. A. Caldwell.
*S. C. Bakhle.
*M. Hawke.
*H. Seelenfreund.
T. G. W. Parry.
A. B. Davies.
P. M. Moffatt.

Surgery.

*A. Gordon.
*H. D. Wyse.
*G. C. Millis.
R. H. Amm.
G. T. Henderson.
*M. E. P. Killard-Leavey.
E. E. Neser.
*T. S. Blacklidge.
*E. H. Griffin.
O. G. Morris.
S. C. H. Worseldine.
*J. A. Currie.
*R. Brooke.
D. Vaughan.
J. L. Faull.
*J. Jemson.
*A. T. W. Powell.
*R. E. Lane.
*G. C. W. Curson.
*H. C. C. Taylor.
*E. R. Boland.
*D. H. Berry.

Midwifery.

*G. F. Gibberd.
J. F. Payan.
R. D. Gross.
J. J. Lewinstein.
I. M. Hurwitz.
J. F. Goodenough.
R. B. Fawkes.
E. Jones.
J. C. Hewetson.
D. A. L. Crawshaw.
L. E. Owen.
K. O. Parsons.
R. D. Owen.
W. S. Hunt.
G. C. Hughes.
J. J. Laws.
M. B. Seng.
F. Martin.
H. J. W. J. Westlake.
J. L. C. C. Walker.
H. N. Hearle.
W. H. Bradfield.
R. J. Cann.
E. C. Seward.
E. F. Hewlitt.
W. R. Spurrell.
D. S. Todd-White.
L. W. Cann.
H. G. Close.
S. P. Jacobson.
F. Marsh.

*Have now completed the Examination.

Society of Apothecaries of London.

Primary Examination.

July, 1923.

Materia Medica and Pharmacy.

H. S. Chiswell.

Anatomy and Physiology.

N. Cohen.

Final Examination.

July, 1923.

Midwifery.

J. Herbert.

Reviews.

Guy's Hospital Reports. Vol. 73 (Vol. 3, Fourth Series). No. 3. July, 1923.

The third number of the present volume of "Reports" consists chiefly of a long article, by Dr. J. M. H. Campbell, on "Chlorosis—a study of the Guy's Hospital cases during the last thirty years, with some remarks on its etiology and the causes of its diminished frequency," and Dr. Nicolson's study on "The Heterotopic Tumours," being the seventh of his fascinating "Studies on Tumour Formation." Two short articles on "The Lævulose Tolerance Test for Hepatic Efficiency and its Application in certain Tropical Diseases," by Captain Gordon Corell, and "Hereditary Familial Congenital Hæmorrhagic Nephritis," by Dr. Hurst complete the number, which is as valuable as usual to those who wish to keep themselves abreast of the times and informed as to the original work that is going on in the Hospital.

Birth.

MARSHALL.—On August 3rd, 1923, at The Manor House, Goodhurst, Kent, to the wife of R. Prynne Marshall, M.R.C.S., L.R.C.P., a son.

Marriage.

UNDERHILL—WORNUM.—On the 2nd August at All Souls Church, Hampstead, Sydney William Frank Underhill, M.A., B.M., B.Ch., elder son of Mr. and Mrs. S. F. Underhill, of 42, Canfield Gardens, Hampstead, to Edith Betty, youngest daughter of the late G. Porter Wornum, Esq., L.R.C.P., M.R.C.S., and Mrs. Wornum, of 58, Belsize Park, Hampstead.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 917.] September 1, 1923. [Ninepence.

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Passim.

PROBABLY of all the months of the year not one affects the life of the Hospital as much as does the advent of September. The fact that rabbits, oysters, pork, and Association football become in season affects it but little, but the maturing of the hop and the general exodus from the Borough to the hop-fields stirs it to its foundations. The rush to a newly discovered gold field or diamond mine, Klondyke, Golconda or elsewhere, becomes an orderly week-end seaside excursion, when compared with this earnest and universal migration as soon as the hop-chief sends word that the luscious fruit is ready for plucking. Pluckers within the wards beg, with tears in their eyes, to be discharged, while out-patients take-in supplies of their favourite medicines to keep up their spirits during their fortnight's absence from hospital. And this is a most excellent thing both for them and for their medical advisors.

MEANWHILE with fewer patients to treat, we suggest that a select committee be formed to sit on the medical report room, which has been overlooked in the general spring cleaning. The adventurous statistician, who seeks old reports from which to compile statistics of diseases, chlorosis or what not, comes out with abrasions on his tibiæ and grey with dust. To obtain the required volume he must climb over a Jung Frau of others, and landslides play havoc with their contents. There is a desk at which to write and we understand that the usual practice is to scratch one's notes on its covering of dust, with the certainty that this modern development of the waxen tablet will be quickly re-covered ready for the next scribe. Much care is expended on the Medical School steps, where lady pilgrims with buckets of holy-water are to be seen daily ascending and descending on their knees. If only one could be spared to tend the small chapel under the stairs, report hunting would become quite a healthy occupation. An alternative suggestion is the provision of a clothes-brush.

IN the August number of the "English Review" there is an article by a well-known physician, entitled "The Failure of the Panel System and the Remedy." He gives reasons for the general lack of support to the Panel System by the medical profession as a whole and explains his own idea as to how this support could be enlisted. That the system is in need of great changes is obvious, as we understand that in a large number of panel

practices the average time per patient is even less than in the Out-Patient Department. We have seen a case of empyema in a child, so advanced that the apex beat was well over to the right side of the sternum, brought up to hospital, after weeks of visits to the panel doctor, not as a case for urgent operation, but merely because the mother was not satisfied with its progress and thought a change of medicine would do it good. This kind of tragedy, for which overwork is to blame, could not occur if there were sufficient time for an ordinary human being to examine his patients properly. One thump on the chest would instantly reveal the condition, but to give this takes time and, if pulse and temperature are normal, the next patient must be called in.

With the first of October another School year begins, and by then the Medical School Office hope to have completed the compilation of the annual Clubs' Union Year Book. To do this they ask that honorary secretaries of constituent clubs should send in their accounts of last season's activities as soon as possible. They are also anxious to compile a list of Guy's "Internationals," and will be very grateful for any assistance with this list. Internationals in any branch of sport will be included in this list, not even chess champions being overlooked.

The competition, promoted by this Gazette, having now concluded, its place has been filled by a new Hospitals competition, organised by the British Charities' Association. The prize fund of £30,000 and all expenses have been most generously guaranteed by Messrs. Bovril, Ltd., who will also defray the cost of an extensive advertising campaign, extending to the arches of the Colonnade itself.

This ensures every shilling of the ticket-money going to enrich the hospitals that so badly need assistance, and should also ensure the most generous support, if it can be considered generous to contribute a crown with the prospect of winning forty-eight thousand in return.

The heartiest congratulations to Mr. H. K. Milward on his election to the Presidency of the Residents, and to Mr. H. Howitt on his election as Vice-President. It was hoped to include in this number an account of their inaugural dinner, but our special correspondent has not sufficiently recovered to submit his report before going to press.

We have received the corrected report of the lecture, delivered by Mr. Charles Mayo, during his visit here, and publish it with the greatest pleasure. We hope the time is not far distant when the leaders of other schools of medicine will be heard at Guy's.

Notices.

Surgical Ward Clerks.

Arrangements have been made for a photograph to be taken of the present Surgical Ward Clerks, on Tuesday, September 4th, at 12.30 p.m.

All Surgical Ward Clerks appointed for the period July to October, 1923, are requested to meet at the entrance to the Medical School promptly at 12.30 p.m. on this date.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the Gazette *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Every Third Wednesday.

"Now is the time for all good men and true to come to the aid of the party."

Being without my dictionary of smart and classical sayings, I am unable to vouch for the accuracy of the above quotation, but on certain happy but crowded days it is my motto. No one has ever yet answered the call, though I hesitate to suggest that this is indicative of a dearth of good men and true, but every time that I find myself one of the small but willing band of ministers in the Out-Patient Department, I pray aloud for aid as often as I write transfer cards. The party is none other than the daily collection of ladies and gentlemen, who meet at fixed intervals to discuss their ailments, talk over the topics of the day with their friends and generally spend a few pleasant hours of sociable gossip. Most attractive little parties these are, spoilt only by the nurse, who insists on the guests going in to see a young fellow, who calls himself "Doctor," writes "Rep. 14" on their letters of introduction, and says they look better. As though they had ever looked anything else than better! And the worst of it is that after seeing him they are forced to leave the reception and go home again. The real habitués of course easily get over this difficulty. A few words, hinting of pain in the side, or bad nerves or temporary loss of sight—usually referred to as not seeing anything since such and such a date—will quickly see them transferred to another part of the building and, with skill born of long practice, may even find them gossiping until late in the evening. I have even heard that some ladies actually have dates printed on their visiting cards, such as:—

MRS. MARTIN,
SHARPS RENTS,

AT HOME,
Surgical Out-Patients,
Every Third Wednesday.

Unfortunately, as is always the case in the larger and less exclusive clubs, there is a great deal of cliquiness and class-snobbery, so much so that a lady with a Colles' fracture and rhinitis refused to notice a neighbour, who had nothing but three different kinds of daily medicine to recommend her, even when incited to do so with the end of a broom-handle. Very many years ago there was a lot of annoyance caused to these good people, by their being prevented by work from attending their favourite "at home" regularly, but the Hospital Authorities looked into the matter and so arranged it that now a visitor may obtain a signed yellow slip of paper, which ensures their liberty to attend regularly for the following week.

The favourite time for attending is Monday morning. This is largely due to the selfish habit of closing the Out-Patient Department on Sundays. So on Sundays the guests sit about outside their street doors eating shell-fish and waiting, and if on Monday some of the luckier ones have eaten enough mussels to induce an acute attack of urticaria, they are sure of commanding the greatest respect and are the lions of the day.

It is the sight of lonely men playing the part of lion-tamer to so many friendly and garrulous old souls, that induces me to call for help. Being of an inquisitive nature, and always keeping my eyes and ears well open all day, my mouth takes over their duties at night, I wandered through the Out-Patient Department late one evening to see what Santa Claus had brought us in his ambulance, when to my surprise I found it almost as full of gossipers as it had been in the morning. This surprise was soon increased by overhearing the soliloquy of some varicose veins of very ancient and honourable lineage. "Strange, my dear, wot airs some o' these young fellers does give theirselves. 'Ere's the new young man, not only calls 'isself doctor, but actually finks 'e is one. You never 'eard such fings as 'e does. Mrs. Clarke, wot comes to 'elp with me baby every year, told 'im 'er little Gertie 'ad the gastricitis that bad and 'e made 'er take orf her clothes ter try and find out where the pain was. Fancy finkin' 'e could do that after all these months and takin' orf all 'er cloths jest after 'er mother 'ad sewed 'er in fer the summer. Then when Mrs. 'Ammond told 'im she had the burnin' in 'er throat, as well she might seein' wot she does with it, he sent for a lookin'-glass and tried to see the burnin', though she 'adn't 'ad a drop since 'er breakfast, not bein' able to get it 'ere. Still I likes that young chap. 'E do give a body time to do a bit o' talkin' and as I was saying to Maudie Mason, wot suffers terrible with 'er internal convulsions, it do do a body good to get away for an hour or two to be quiet-like. . . ."

I sought the solitude of the Gordon Museum and became quiet-like myself. So there was still among us at least one misguided and self-centred booby, who imagined that the swarms of local celebrities, who thronged the Out-Patient Department every day were actually ill, and, stranger still, that they wanted to be cured. He did not realise what a splendid game of "General Post" the whole thing was, or that, just as the children collect cigarette-cards, so

their parents collect "Out-Patient" and "Transfer" cards. One champion collector, who had the entire set but one, actually intimidated her husband into visiting Dr. Dowling on Friday evenings in order to complete her collection.

It is right and proper that these things should be made known lest the daily parties should be unduly prolonged. As an alternative I suggest that fried fish and chips should take the place of tea and buns after seven o'clock and that Mayhew should be licensed to sell stout in the recovery room.

A Dermatological Problem Dedicated to Research.

Assuredly Research is the order of the day,[1]
'Tis marvellous however how slowly on her way
She lifts her leaden wings and dallies with Delay.
Ten years have passed[2] since first we heard how Chicken-pox had wed
With Herpes Zoster (whose ancestry was closely traced by Head[3])
Careful reports of cases have in sundry Journals[4] spread
The knowledge that the news is true, but whither has it led?
We still remain with puzzled brain awaiting further light
Why in the midst of chicken-pox, when barely at its height,
A case of herpes zoster should straightway spring to sight.[5]
A medico called in to treat the shingles of a mother,
In three weeks time finds chicken-pox on the small girls and their brother.[6]
We order arsenic for a child who has had chorea for years;
Within six weeks of treatment, a shingles-rash appears;[7]
This breeds in turn a chicken-pox ere many days have sped
In others of the family who take their share of bed.
Some oldish men start shingles first and when the rash is dying[8]
Break out in spots of chicken-pox which sets them once more sighing!
We daily read of problems solved in games of Bridge and Chess;
For medical minds the interest in disease can scarce be less,
Yet anxious queries *re* our problem meet with scant success.

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8. *B.M.J.*, 11th February, 1899. *St. Bart.'s Hosp. Journ.*, August, 1900, Arkwright. *Journal Amer. Med. Assoc.*, 1910, p. 532, Schamberg. *Brit. Journ. Derm.*, 1914, Pernet.

W. P. LE FEUVRE.

Knysna, South Africa.

Reviews.

Surgical Nursing and After-Nursing. A handbook for Nurses and others. By H. C. Rutherford Darling, M.D., M.S.Lond., F.R.C.S.Eng., F.R.F.P.S.Glasgow. (Messrs. J. and A. Churchill, London.) Price, 8s. 6d. net.

This book, written avowedly for nurses, might well be read by every dresser and ward clerk in the surgical wards. It is divided into two sections. Section I. deals with general surgical nursing and treats a variety of subjects, such as sepsis, infection, gangrene, burns and scolds, dressings, after-treatment of operations, hæmorrhage, shock, splints and bandaging. Section II. is devoted to regional surgical nursing.

The chapters are written in a very readable manner and are full of facts, which should be of everyday knowledge to all qualified men, but which in so many cases are told to them by the nursing staff. A dresser, with this book, would rarely be at a loss as to how to carry out his post-operative dressings and, short accounts of the pathology and signs and symptoms of each condition preceeding the methods of treatment, the book has a distinct value for a prospective examinee. In short, it is recommended as a most valuable addition to all private medical libraries.

Osteo-Arthritis and its Relationship to Other Diseases of Joints.

CLINICAL LECTURE BY Mr. PHILIP TURNER.

GENTLEMEN,—Osteo-arthritis, though not a fatal disease, is nevertheless of considerable importance on account of its frequency, the pain and disability to which it gives rise, its chronic and progressive course, and the fact that treatment is often palliative rather than curative. My object to-day is to consider its ætiology and the relationship which it bears to other inflammatory diseases of joints, rather than to consider in detail the signs and clinical characters of the various types of this disease which have been recognised, or of the symptoms which arise when important individual joints are involved.

Cases of osteo-arthritis are familiar to you all. Any morning at out-patients you will see several; and among the old patients you will find some who have attended for treatment, probably in the electrical department, for many months, or even years, most likely with a good deal of relief, but without any real cure of the condition.

The symptoms are usually characteristic: The patients complain of pain, stiffness, swelling, and deformity of the affected joints, with impaired function, and muscular wasting, the latter often marked in old-standing cases; the joint will creak and grate on movement and often osteophytes and "lipping" of the margins of the articular surfaces can be detected on examination.

The patients are usually, but by no means always, middle-aged or elderly. In some one joint only will be involved; in others several or many; while it is by no means uncommon when a patient complains of a single joint, to find evidence of the disease in other joints, though the symptoms may be slight or even absent. There is no pyrexia, and constitutional symptoms are absent. The viscera are not affected, and death is due to some intercurrent disease which is independent of, or only indirectly due to, the osteo-arthritic condition. Clinically it is a chronic incurable disease.

Let me now remind you of the changes which take place in an osteo-arthritic joint. These consist essentially of destruction and absorption where the articular ends of the bones come into contact, together with overgrowth and hypertrophy at the margins of these areas and in the peripheral parts of the joint. First, the articular cartilage becomes fibrillated and eroded, exposing the articular ends of the bone beneath it. These bony surfaces are also subsequently worn away and in later stages may show the characteristic appearances of grooving and eburnation.

The peripheral changes are overgrowth of cartilage and bone at the margins of the articular surfaces, causing "lipping," and leading to the formation of osteophytes; hypertrophy and overgrowth of the synovial membrane, forming fringes which may become cartilaginous or which may become detached so as to form loose bodies in the joint cavity; while sometimes the cartilaginous or bony change extends into the ligaments. It is important to remember that, though there is stiffness and limitation of movement, typical osteo-arthritic joints do not become ankylosed, though a "pseudo-ankylosis" may be present either as the result of the interlocking of osteophytes or of ossification taking place in the ligamentous structures.

We have now to consider the cause of these changes; how they are brought about; and the relationship of osteo-arthritis to other diseases of joints. To do this it is necessary first of all to consider some general points about the structure of joints and the changes which take place in them when they become inflamed.

The following four structures may be distinguished as entering into the formation of a joint: (1) The articular extremity of the bone, including in some cases the epiphysial line; (2) the articular cartilage; (3) the synovial membrane; (4) the capsule and ligaments.

Of these structures the synovial membrane is of a high degree of vitality. It has a good blood supply, a structure comparable with that of other serous membranes, and an important physiological function—the secretion of synovial fluid. The articular extremity of the bone is also a living structure, composed of cancellous tissue with a good blood supply and containing plenty of cellular elements.

The cartilage and ligaments are, on the other hand, of a low degree of vitality, with a simple structure, a poor blood supply, and a

function which is mechanical rather than physiological.

A consideration of these facts will show that the synovial membrane, as is the case with other serous membranes, will be particularly vulnerable to any injury, or to infective or other inflammatory disease. The bone, with its delicate, vascular cancellous tissue is also liable to be so attacked, especially in children where the physiologically active epiphyseal cartilage is in close relation with the joint, or even, as in the upper epiphysis of the femur, actually within the capsule. On the other hand, the cartilage and ligaments, with their simple structure, few cells, poor blood supply, and mechanical function, though they are likely to be secondarily affected, can rarely or never be the actual starting point of an inflammatory disease of the joint.

It is also important to remember that the synovial membrane, again like other serous membranes, has a considerable power of recovery and repair, and that inflammation of this membrane, even of great severity and accompanied by suppuration, may terminate in resolution, provided that the disease does not last too long and that the cartilaginous, bony, and ligamentous structures are not involved.

In many ways inflammation of a joint can be compared with inflammation of a bone. Thus a bone consists of three structures—the periosteum, the compact tissue, and the medulla. Of these the periosteum, with its complicated structure, its good blood supply, and its important osteogenic function is particularly liable to be attacked by infective and inflammatory diseases. It, however, possesses also considerable power of repair, and, if suppuration does not occur and the disease subsides quickly, complete resolution is possible. Inflammation of bone may also commence as an osteo-myelitis in the vascular and cellular medulla and cancellous tissue; but, on the other hand, it is extremely unlikely to start in the compact tissue, of low vitality, comparatively poor in cellular elements and blood vessels, and composed almost entirely of inert bony material. In whichever of the three component parts of a bone the inflammation starts we know that there is a strong tendency for it to extend to the other two. For instance, in a case of periostitis it is certain that if this continues for any length of time the compact bone and the medulla will also become involved. Hence we should always think of inflammation of bone as a whole and not regard inflammation of each of its component parts as a separate and distinct pathological process. The terms periostitis and osteitis are still employed, but we realise that if a patient has periostitis, inflammatory changes are certain to be found in the compact tissue and the medulla as well.

This is equally true, but not so generally recognised, in the case of joints also. The inflammation may start in the vulnerable synovial membrane, or in the cancellous bone, either beneath the articular cartilage or possibly near the epyphysial line, but in either case, at any rate if the inflammation persists, the other constituents parts of the joint will become involved as well.

It follows that no sharp distinction can be made between Synovitis and Arthritis. We have seen that inflammation of a joint is very likely to commence in the synovial membrane and to show itself as an effusion of fluid into the joint cavity, but, unless it quickly resolves, the other component parts of the joint will certainly be affected. Consider, for example, traumatic synovitis—a very common form of joint disease. This may, and with efficient treatment commonly does, terminate in resolution. But if it becomes chronic and goes on for weeks or even months, a condition of traumatic arthritis developes in which cartilage, bone, and ligaments are also involved. I do not, of course, mean to suggest that the term Synovitis should not be used, on the contrary, it is a most convenient and descriptive one; but as Periostitis should suggest to us an inflammation of the whole bone commencing in the periosteum, so should Synovitis suggest to us inflammation of a joint commencing in the synovial membrane, but threatening to extend to all the other structures which enter into the formation of the joint.

There are certain important analogies between synovial membranes and serous membranes such as the peritoneum, pleura and pericardium. Both are peculiarly liable to secondary infections of a pyæmic nature; both may be attacked by toxic substances which are circulating in the blood. While easily damaged, both have, under favourable circumstances, considerable powers of recovery and repair.

It is now necessary to consider arthritis as a whole and to attempt a classification, remem-

bering that this term is used in its widest sense so as to include synovitis. The classification of the varied forms of inflammation of joints, and the consideration of arthritis as a whole, are rendered rather difficult by the fact that certain of these diseases are regarded as surgical and others as medical, while some are regarded as equally within the province of the physician and the surgeon.

Though the pathology of certain forms of arthritis is still obscure, we may adopt the following as a working classification :—

A.—Non-Infective Arthritis—

1. Traumatic arthritis, including the arthritis caused by the presence of loose bodies, and the arthritis which follows a hæmarthrosis.

2. Mechanical Arthritis, which arises as the result of a deformity altering the mechanism of the joint. Such is the arthritis of the ankle joint following an unreduced Pott's fracture. Similar changes occur in such deformities as hallux valgus, genu valgum, and flat foot.

3. Gout.

B.—Infective Arthritis, due to infection of the joint by some definite micro-organism.

1. Staphylococcal and streptococcal arthritis. These are usually pyæmic in origin.

2. Gonococcal arthritis.

3. Pneumococcal arthritis.

4. Typhoid arthritis.

5. Tuberculous disease.

6. Syphilitic disease.

7. Dysenteric arthritis.

8. Acute rheumatism should almost certainly be included in this group. Possibly also the arthritis of children known as "Still's Disease."

C.—Toxic Arthritis, due to the absorption of toxins from chronic infective foci elsewhere, *e.g.*—

1. Pyorrhœa alveolaris and dental sepsis.

2. Intestinal stasis and other foci in the alimentary tract such as chronic appendicitis and cholecystitis.

3. Infection of the antrum, nasal sinuses, tonsils, and naso-pharynx.

4. Various obscure forms of arthritis with a fairly rapid onset, involving many joints, often attributed to exposure to cold and damp, and known as "chronic rheumatism" or rheumatoid arthritis, may probably be included in this group.

It must be admitted that there is a good deal of uncertainty as to the true position of many of the diseases in group C. Some of these may really belong to group B, the pathogenic organism having hitherto escaped identification. This difficulty is illustrated by the bacteriological examination of the joints in cases of gonorrhœal arthritis. In some of these gonococci have been identified; in others no gonococci are present, but streptococci or staphylococci are found; while in yet another group no organisms can be identified at all. Yet in this disease the source of infection is so certain, and the signs and symptoms are so characteristic that there is no doubt but that it should be included in the infective group.

In many of the diseases included in group C there is also a good deal of difference of opinion as to the importance of some of the sources of toxic absorption, but it is generally agreed that dental sepsis is a frequent and highly important cause.

You will notice that in the above classification I have not included osteo-arthritis. I have purposely omitted it, for I regard osteo-arthritis, not as a definite and distinct inflammatory disease of joints, but rather as an end result, or termination, of many different forms of arthritis.

To make my meaning plain let us make a further comparison between inflammation of bone and inflammation of a joint. Chronic and long continued inflammation of bone very commonly leads to a permanent ivory-like thickening, of intense hardness, which persists after the active disease has subsided, and is known as "Sclerosis." No one would think of calling sclerosis of bone a definite disease; it is a permanent tissue change, the end-result or termination of a long continued chronic inflammation. In much the same way, I would suggest that osteo-arthritis is an end-result or termination of a long-continued chronic arthritis which may belong to any of the groups in the above classification.

You will also notice that in the classification I have included certain diseases such as Still's disease, traumatic arthritis, and rheumatoid arthritis which are often included in the term osteo-arthritis. These diseases, however, in their early stages are certainly iinflammatory and do not show the characteristic changes of osteo-arthritis. I therefore include them as definite inflammatory diseases for though they

may terminate in typical osteo-arthritic changes they need not necessarily do so. They may possibly resolve, or the joints may become ankylosed.

In most standard text-books osteo-arthritis is described as a disease but it is generally admitted that it is a disease not easy to define or to limit. Thus, in Allbutt and Rolleston's System of Medicine we read: "The cases in which the joints are the seats of osteo-arthritic lesions, such as . . . although they resemble one another closely in their morbid anatomy, cannot be considered under a single clinical heading. It is indeed open to doubt whether the lesions of osteo-arthritis are due to any one specific morbid process, and are not rather a series of changes which may occur in joints as the result of various causes." Russell Howard, in "The Practice of Surgery" (1922), says of osteo-arthiritis: "The condition is not a pathological entity, but it is convenient to include several different joint affections under this term, as the pathological anatomy of the diseased joints and the clinical features of the disease are similar in nature."

While quite in agreement with these statements I would go a stage further and regard osteo-arthritis, not as a number of separate joint affections, but as the termination of the arthritis set up in a number of very varied causes.

The usually accepted terminations of arthritis are the following:—

1. Resolution.—This favourable termination may occur even in acute and infective cases, provided that it is not long-continued and that it is confined chiefly to the synovial membrane.

2. Suppuration.—A very serious occurrence, especially in large or complicated joints. It may give rise to a fatal pyæmia, or, when long-continued, to death from toxæmia, exhaustion, or lardaceous disease.

3. Ankylosis.—Bony ankylosis depends upon destruction of bone and cartilage with formation of masses of granulation tissue so that the ends of the bone become directly continuous. Fibrous ankylosis occurs if the granulation tissue does not ossify but becomes fibrous. Pseudo-ankylosis depends upon fibrous changes in the structures around the joint, especially muscles, ligaments and tendons.

4. Pathological dislocation; depending upon destruction of bone and softening and giving of the capsule.

To the above I would add:—

5. Osteo-arthritis.

We will now endeavour to ascertain what particular varieties of arthritis are likely to terminate in this way.

It is recognised that osteo-arthritis may be due to a large and varied series of causes and that in each case similar changes will take place in the articulation.

The following varieties of arthritis will generally be agreed to lead to osteo-arthritic changes:—

1. Traumatic arthritis.—Remember that no sharp line of distinction exists between this and traumatic synovitis. It may follow a severe injury such as a dislocation, or a fracture involving the articular surfaces, but may also occur after a sprain or contusion. It also includes the arthritis set up by a displaced cartilage, a loose body, and hæmorrhage into a joint.

2. Mechanical arthritis.—Here, owing to deformity, or to abnormal strain, the mechanism of the joint is altered. Striking examples of this are seen in hallux valgus and in the ankle joint after an unreduced Pott's fracture.

3. Chronic septic arthritis.—Under this heading we may include both chronic infective arthritis and the arthritis due to auto-intoxication from dental sepsis, intestinal stasis, chronic appendicitis, cholecystitis and similar causes.

4. Arthritis of uncertain nature, the result apparently of exposure to cold and damp. This is often described as "chronic rheumatism," rheumatoid arthritis, or rheumatic gout.

5. Arthritis of old people.—This is often regarded as a senile degenerative change, but should, I think, be regarded as due to one of the above-mentioned causes, often so slight in degree, that it may be overlooked, acting on the senile tissues which have lost to some extent their power of resistance and repair.

6. Arthritis in a pseudo-arthrosis after an ununited fracture. It is interesting, and also of considerable ætiological importance to notice that these false joints very commonly show osteo-arthritic changes, often to a marked degree.

Often two or more of these causes will be found to co-exist; for instance, an elderly patient in whom osteo-arthritis may follow a comparatively trivial injury; an osteo-arthritis of traumatic origin where dental sepsis is also present; and a patient who has suffered from chronic rheumatism due to cold and damp who also has dental sepsis.

According to the view I have put before you the above should be regarded, not as a list of the causes of osteo-arthritis, but as a number of different varieties of arthritis which will very likely terminate in osteo-arthritic changes; but not necessarily so, for, under favourable circumstances, especially efficient and early treatment, a better result may be hoped for.

If you will glance at the list of the varieties of arthritis which are likely to lead to osteo-arthritic changes and compare this with the general classification of arthritis, you will see that the essential factors for the development of osteo-arthritis are (1) that the arthritis shall be chronic and long-continued, and (2) that the joint shall be movable. An ankylosed joint does not become osteo-arthritic, and conversely a true osteo-arthritic joint does not become ankylosed, though a pseudo-ankylosis may arise from interlocking of osteophytes, ossification of ligaments, or peri-articular changes.

Indeed it may be stated that osteo-arthritis is a possible, and often a probable, termination of all forms of chronic arthritis, except those where destruction of bone, accompanied by the formation of granulation tissue, leads to obliteration of the articular cavity with bony or short fibrous ankylosis. Osteo-arthritis is thus very unusual after tuberculous disease or acute supparative arthritis, for these usually terminate in ankylosis. On the other hand, osteo-arthritic changes may develop in cases of gonococcal arthritis, repeated attacks of true rheumatism and even gout.

Osteo-arthritis may again be compared with sclerosis of bone. The latter is certainly an end-result of disease and not itself a disease; it may occur in practically any chronic inflammation of bone, though it is unusual in tuberculous disease where the process is essentially destructive.

We have now to consider the way in which osteo-arthritic changes are produced in a joint as the result of a chronic arthritis. Let me remind you again that these changes are destructive where the articular surfaces come into contact, and that there is hypertrophy and overgrowth in the peripheral parts of the joint. The first changes take place in the articular cartilage: This structure becomes velvety in appearance, breaks up into fibrillæ, while the cells at first proliferate and then disappear. This is usually regarded as a degenerative change, but it should be, I think, rather regarded as a secondary result of chronic inflammation of the more vital parts of the joint, the synovial membrane and the articular extremity of the bone, particularly the former. In any chronic inflammation of a joint there is bound to be some thickening of the synovial membrane and an increase of fluid in the joint. It is almost inconceivable that this should be so without some effect on the cartilage which covers all the joint surface which is not lined by the synovial membrane. Chronic inflammation of joints in an early stage is not often investigated in the post-mortem room, and I know of no series of observations which throws light upon this point.

That cartilage does readily undergo some such damage is, however, well-recognised. For instance, Dr. Bulloch, writing on Rheumatic Fever in Allbutt and Rolleston's System of Medicine, says, "According to Cornil and Ranvier the cartilage is always more or less affected, and shows enlargement and multiplication of its cells. In the majority of cases such changes have been found to be focal rather than diffuse. Occasionally the cartilage may be affected throughout its entire thickness." And this is in an acute inflammation, of short duration, which will probably terminate in resolution. I think that it is fair to assume that in a chronic arthritis, whether of traumatic, infective, or toxic origin, provided that it is of sufficient duration, similar changes in the cartilage will take place. The actual erosion and destruction of the cartilage depends chiefly upon pressure and the movement which takes place in the articulation. We have seen that for the development of osteo-arthritis it is essential that movement shall take place, and as the result of this the velvety, fibrillated, softened cartilage is mechanically rubbed away and destroyed until the underlying bony suurfaces are exposed. The bone, which at an early stage on X-ray examination shows a characteristic increase of translucency with remarkable definition of the cancellous tissue, appears to be abnormally soft, possibly owing to absorption of the calcium salts.

Continued movement will thus bring about still further erosion and lead on to the destruction of bone, eburnation, and grooving of the exposed surfaces. It will be seen that this process, when once it starts, tends to be progressive, and, especially in elderly people whose tissues have passed their prime, may lead to remarkable destruction of the bony surfaces which enter into the formation of the joint.

We have now to endeavour to find an explanation of the peripheral hypertrophy and overgrown. This I believe to be due to a secondary increased vascularity in the structures adjacent to the eroded surfaces. This may in part be brought about by the original chronic arthritis, but it will, however, be greatly increased by the mechanical effect of the rubbing together of the eroded surfaces.

The effect of increased vascularity as a cause of overgrowth of bone may be illustrated by reference to a well-known example. In the ordinary chronic varicose ulcer of the leg, when situated on the inner aspect, there is very little tissuue between the base of the ulcer and the periosteum. As the result of the chronic irritation the periosteum beneath the ulcerated area produces new bone and gives rise to a slightly raised surface usually closely corresponding to the outline of the ulcer. That this is due to a localised hyperæmia rather than to a definite periostitis is shown by the sharp outline and the definite edge, for if the new bone formation depended upon inflammation of the periosteum the thickening would be fusiform in shape and gradually shade away into normal bone, as is seen in the typical "node" which is the result of a localised periostitis.

That friction between abnormal bony surfaces causes a condition of hyperæmia is well recognised in the case of fractures. Thus, if the fractured ends are not fixed, and movement is free, great masses of callus may be produced as the result of the increased vascularity caused by the excessive movement. Again, in former days, in cases of ununited fractures one of the methods of treatment adopted was to rub the ends of the bone together in order to stimulate the formation of callus.

The effect of this hyperæmia, due to pressure and friction between the eroded surfaces will be most marked at the margins of the areas of pressure and absorption, and it is here that overgrowth of cartilage and bone take place giving rise to the characteristic "lipping." This is at first due to growth of cartilage so that in the early stage, though lipping can be easily felt, little or nothing abnormal, beyond increased translucency of the bone, may be seen on X-ray examination. Later the cartilage becomes ossified and the bone itself also shows similar overgrowths, often of remarkable extent, and definite osteophytes are formed. These processes tend to extend into the synovial membrane and ligaments, the former not infrequently showing a cartilaginous change, while the latter may become ossified.

As the result of the peripheral hyperæmia the synovial membrane becomes thickened and thrown into folds and fringes which may become detached and form loose bodies in the cavity of the joint. The ligaments, owing to the hyperæmia and exudation, may become softened and weakened, thus adding to the sense of insecurity which, however, is largely due to the wasting of the muscles which is so likely to occur in osteo-arthritis.

It is well-known that in osteo-arthritis cystic swellings, known as "Morrant Baker's cysts," are frequently present in the neighbourhood of the affected joints. These are usually explained as due either to hernial protrusions of the synovial membrane which may become shut off from the joint cavity, or to the collection of fluid in bursæ, either normal or adventitious, which are in communicatiion with the joint.

This explanation has never appeared to me to be altogether satisfactory. The amount of exudation into the joint is rarely excessive in osteo-arthritis and it is not altogether easy to see how hernial protusions of the synovial membrane can be produced without excessive distention. I would suggest as a more probable explanation that these cysts are due to hyperæmia extending to the peri-articular structures which would readily account for effusion into synovial tendon sheaths, and any adjacent bursæ, either normal or adventitious, whether communicationg with the joint or not. It would also explain how large Baker's cysts might be present with little effusion into the joint cavity.

You will have noticed that I have said nothing about Charcot's disease of joints in which changes occur very similar to those of oteo-arthritis. I have purposely omitted it

for without doubt this is essentially a trophic disease due to the disturbed innervation which is the result of locomotor ataxy and similar diseases of the spinal cord. At the same time it is probable that Charcot's disease does not occur in perfectly normal joints, but those in which there has been some form of chronic arthritis or which even already show some oteo-arthritic change. If this is so the rapid destruction and disorganisation of a joint in Charcot's disease might be compared with the rapid extension and excessive destruction of soft parts which takes place in a bed sore when the nerve supply is cut off by injury or disease.

We have now to consider briefly the practical bearing of these facts and theories on treatment. I have often before in clinical lectures emphasised the importance of the investigation of the cause and the beginning of disease, and of its early symptoms and diagnosis. All diseases must have a beginning, and often, in their early stages, they are accompanied by slight organic changes, with slight or unimportant symptoms, and are amenable to treatment; while in their later stages they may cause irreparable structuaral damage and be, not only incurable, but also only to a slight degree capable of relief. This is peculiarly applicable to osteo-arthritis. It is clear that with the view I have put before you the ideal treatment of osteo-arthritis is Preventive. That is we should endeavour to diagnose and treat the trouble in the early stage of infective or other form of arthritis when resolution is still possible, and before the irreparable structural changes have occurred.

I do not mean, of course, to say that osteo-arthritis is wholly preventible, but I do maintain that early diagnosis and prompt treatment, especially with improved methods of recognition of the particular cause, and of the infecting organism, would in many cases prevent or arrest the disease and render much less frequent the crippling and disability at present seen in patients comparatively young and otherwise healthy. There is certainly plenty of opportunity for investigation and research in regard to these points. Unfortunately, however, owing to the insidious onset of these forms of arthritis, their chronic course, and comparatively slight symptoms, patients so often do not present themselves for treatment until the disease is so far advanced that structural changes have already occurred.

For practical purposes we may divide cases of osteo-arthritis into early and late. Roughly those which on X-ray examination show no change beyond increased translucency of the articular bone may be considered as belonging to the former group; while in the latter there will be evidence of erosion of the articular surface with lipping at their margins. In early cases it is of the greatest importance that the source of infection shall be recognised and efficiently treated. Deformities must be corrected and injuries, particularly fractures near a joint or actually involving the articular surface must be carefully treated. The importance of pyorrhœa alveolaris and dental sepsis is well recognised, but other septic foci must also be remembered, including in addition to those already mentioned, septic tonsils and, in women, the pelvic organs. Vaccine treatment may be tried though the results are uncertain, possibly because our knowledge of the bacteriology and of the foci of infection is imperfect. An autogenous vaccine prepared from pus from the infective focus may be expected to give the best results.

In late cases, where definite organic changes have occurred, the source of infection should still be sought for and dealt with. It must, however, be remembered that, when the cartilage and bony surfaces are eroded, and lipping and osteophyses are present, irreparable damage has been done, and that treatment of pyorrhœa combined with vaccine treatment can never restore the joint to its normal condition. I mention this particularly because I cannot help feeling that extensive extraction of teeth is sometimes too recklessly advised, or that patients are led to expect too much from this treatment. At any rate it is not uncommon to come across patients who have had all their teeth extracted for "chronic rheumatism" which has been attributed to pyorrhœa and who complain somewhat bitterly that their rheumatism is no better. Possibly in some of these there may have been some other unrecognised focus, but in many the explanation is that the affected joints were already hopelessly damaged. It is certainly correct to treat the septic focus in the hope that it will improve the general health, that it will prevent other joints being involved, and that exacerbations or fresh attacks of septic arthritis in the already affected joints may be avoided. It is wise, however, not to give too hopeful a prognosis in joints which show definite structural changes on X-ray examination.

We have seen that intra-articular pressure and movements of the joint are important factors in the production of osteo-arthritic changes. Theoretically then it would appear that rest and avoidance of pressure between the articular surfaces should be an essential part of treatment. Unfortunately there are many difficulties in the way. For one thing when several joints are affected, as is often the case, it is impracticable. Also, when a joint is immobilised, stiffness or pseudo-ankylosis from peri-articular changes may be the result. Again, in the lower limb, where the question will usually arise, it is not an easy matter without complicated apparatus to prevent contact between the articular surfaces in the knee or hip joints. However, in early cases where there is much pain, or in later cases where the trouble is intractable it should be tried Rest in bed with extension by a weight and pulley, wearing a moulded leather support, getting about on crutches or a calliper splint, are methods which have been employed with this object. It is, however, advisable that passive movements of the affected joints should be carried out daily in order to avoid stiffness.

Generally speaking both late and early cases are benefited by a warm dry climate and by treatment at one of the well-known Spas. Unfortunately with many of the patients it is not possible to arrange for this treatment.

Every effort should be made by good diet and tonics to improve the general health. Of drugs Pot. Iod., Guiacum and Salicylates are of service. Massage, not of the joints, but of the muscles above and below, will often give strength and an increased feeling of security.

Especially in late cases great relief is often obtained by the application of heat in the form of electric light baths, hot air or water baths, or diathermy.

In some elderly patients, where there is great pain and disability, and where a single joint is affected it may be advisable to aim at getting a fixed joint. This can often be done by the application of a plaster splint, taking care that the joint is fixed in the most useful position.

Operative treatment is sometimes indicated in severe and intractable cases in patients of middle age or under. This is usually to secure a fixed joint in good position in the cae of either the knee or the hip.

When it is hoped to get a movable joint osteophytes may be gouged away or the operation of arthroplasty may be performed. Unless cases for operation are most carefully selected the results are disappointing.

Obituary.

JOHN ROBERT STENHOUSE

We regret to record the death, at Lewes, Sussex, on August 10th, of Dr. John Robert Stenhouse, aged 52 years. Dr. Stenhouse received his medical education at Guy's Hospital, and took the diplomas of M.R.C.S.Eng., and L.R.C.P.Lond. in 1894; he graduated M.B., B.S.Lond. in 1895, and M.D. (qualified for gold medal) in 1907; in 1904 he took the D.P.H. He held the posts of Resident Obstetrician and House-Surgeon at Guy's Hospital, and Clinical Assistant at the Royal Ophthalmic Hospital, Southwark. Dr. Stenhouse started practice in Lewes in 1897, and was Honorary Surgeon to the Victoria Hospital there. He was at the height of his success when the war broke out, and as a Surgeon-Lieutenant in the Sussex Yeomanry, he was mobilised early in August, 1914. He did not return to his home until he came back from France, in 1918, shattered in mind and body.

In Lewes, where he was Medical Officer of Health and School Medical Officer, he will long be remembered for his work in the prevention of infantile mortality, and for the object lesson he set on the treatment of pulmonary tuberculosis in his private sanatorium on the Downs. Among his fellow officers in the war he will be remembered particularly for his gallantry and devotion on the night of the heaviest raid at Etaples, in May, 1918, when he organised and lead a body of volunteers, who rescued many men from burning huts, when rescue seemed impossible and official attempts at it had ceased. An athlete and keen sportsman, Dr. Stenhouse won trophies at Guy's in his student days. He leaves a widow, two sons and a married daughter to whom our sympathy is extended in their sad bereavement.

The Value of a Knowledge of Medicine in Dentistry.

Report of a Lecture by Dr. C. H. Mayo, in the Clinical Theatre of Guy's Hospital, on Tuesday, May 8th, 1923.

Gentlemen,—

It is only during the last forty years that medical specialists have developed. In the investigation of disease we have necessarily worked backward rather than forward in studying its cause. This was necessary because of the marvellous observations made by older men of medicine in the diagnosis of disease based on symptoms alone, before it was understood that examination of the blood, and various microscopical examinations would reveal the bacterial specialist causing the disease. It is much more difficult for the physician of to-day to practice alone than for the physicians of forty years ago, who from necessity, were better observers.

Hippocrates observed that he was curing certain types of rheumatism by the removal of foci of disease. Gross, in 1800, confirmed what Hippocrates had written: that he had been able to cure recurring disease by the removal of a local focus. After all, how many of our diseases are of this type, with foci so obscure and so trivial that we pay almost no attention to them! There are two types of disease of the teeth that result in the chronic recurring ailments: the apical abscess, which is a root disease and may be carried for ten or more years without pain, and the pyorrhœal conditions in which a germ, often *Streptococcus viridans*, gets beneath the gum. The painful tics of the sensory nerves may be expected to accompany pyorrhœal more often than apical diseases. In considering this point we are reminded of the localisation of bacteria in the different tissues of the body.

Bacteria should be considered from the standpoint of what they manufacture chemically. One group produces yellow pus, one green pus, and one brown pus with a little hæmorrhage. We may have toxins in the body which, because unrecognised, apparently may not produce any effect on the body for many years, then, too late, arterio-sclerosis or chronic nephritis develops as the end result. We think of appendicitis, for instance, as due to the colon bacteria because these bacteria are found in the pus, when, as a matter of fact, the condition is due primarily to streptococci in the tissue of the appendix, the final exudate being colon infected. Why do certain persons have ulcers of the stomach or gall-stones? Chronic recurring disease, as a rule, is caused by foci of infection. In the bacteria of farm life there are five million bacteria to each cubic centimeter of soil. The slime on the root will feed only the kind of bacteria that will satisfy it as food, and they as soil chemists feed the root bed as soil solvents. There are many types of bacteria living in soil, among which the nitrogen producers of clover and alfalfa are important; they make their product from the nitrogen of the air.

There are, also, the types of organisms which build shells from calcium. We do not consider how remarkable it is that the oyster and the clam can throw out a secretion of dissolved lime which accumulates on the shell and is not washed away by the fluids around it. The shell in fact is built by microbes living on the mucous exuded by the mollusk, which build the shell, layer after layer, as it grows larger. The pearl within its body is due to disease, misplacement of the microbes through injury just as the stone grows in the kidney of man; it is the direct result of the action of bacteria on a foreign body. Great difficulty was experienced in transplanting oysters from the Atlantic to the Pacific Coast, but finally the bed of the sea was removed with the oysters, and the project was successful.

Two types of organisms are required for the development of stone in the kidney. One causes infection which furnishes the foothold for the development; the other produces stone from the material in hand. These microbes vary in their work just as much as workers in brick, stone and cement. By grinding the bicuspid teeth of dogs, extracting the pulp cavities and filling the cavities with bacteria from the urine of patients with stone in the kidney, stone will be produced in the kidneys in about 86 per cent. of the animals. The teeth are filled and the work done by a dentist with the animal anæsthetised.

The question that comes to one's mind is: What brought about the disease in the patient? What is the chemical work of this kind of bacteria? Is the toxin a poisonous toadstool or is it a mushroom which is doing no

harm? The streptococci throw out chemical material which stimulates the cells of the mucous membrane to exude crystalline material, and stone develops secondarily as in a diseased gall-bladder. The mild type of chronic infection of the gall-bladder, not the severe type, causes galls-tones; their incidence is only about 70 per cent. The deer and the horse do not have gall-bladders, and human beings can get along very comfortably without them because their ducts become slightly larger and serve as a reservoir for bile as well as for its delivery. Injecting bacterial culture from a subacute gall-bladder into the blood of an animal produces inflammation in its gall-bladder.

Dentistry should be associated with the treatment of disease. The dentist trained in medicine can do more in recognising other diseases from mouth inspection than any other specialist. It will often be found that a bad tooth is the cause of rheumatism and other recurring diseases. The dangerous tonsil is not necessarily enlarged, it may be small. The fact that the tonsil is not redder than the gum around a diseased tooth is seldom appreciated by physicians. In all types of disease a thorough search should be made for all foci of infection, and the chemistry of the microbe that is responsible should be considered. In the past we have accepted without investigation a great many facts that we are now but beginning to investigate. All life, whether plant or animal, is changed either by electric or chemical action. If I want to move my hand, the high voltage current goes down from my brain to the anterior horns of the spinal cord; from the anterior horns it proceeds with better insulation at a different voltage to muscles for action. The bacteria of poliomyelitis in the blood acts on the transformer of energy if it is carried to this region, the ganglion cells of the cord, before they are eliminated from the circulation. These transformers of energy may be saved from burning out if the antibodies are used early enough to prevent it, just as an electric current is turned off to prevent over-heating.

While it is true that your work as students is more exacting, more difficult possibly, than that of your professors when students, you will be recompensed by the greater benefit which will be derived by those coming under your care. One of the many other pleasures of living is that you do not cease to progress yourselves.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—As an old Guy's man and a Freemason I am venturing to ask you if you will accord me some of your valuable space in which to express a few remarks concerning the absence in the Masonic world of any especial Guy's Lodge. To those of us who are already masons, or who contemplate such a step, the existence of a Guy's Lodge to join would make, surely, an almost irresistible appeal.

Many of the other London hospitals possess their own Lodge and is it not deplorable to think that in our own fine old Hospital, with its notorious enthusiasm and esprit de corps, there exists no Masonic expression of these qualities which such a Lodge would encourage and perpetuate in its own particular and very special manner. That Guy's—the mother of so many of us—with her ready participation in our diverse interests and activities has never included Masonry amongst them, is, I think, an unfortunate self limitiation of maternal spirit and a deprivation of her support in a direction which might be strongly welcomed by many of her sons. Perhaps this expression of a purely personal opinion will elicit a response through your columns which will permit a definite conclusion to be drawn as to the possibility of founding a Guy's Lodge with its motto "Dare quam accipere."—Yours faithfully,

H. GORDON SPAIN.

42, Harley Street,
W.1.
23rd August, 1923.

To Cambridge Men in London.

DEAR SIR,—May I, through the medium of your columns be permitted to bring to the notice of the Cambridge men in your Hospital, a rule of the Cambridge University Medical Society, which states that old Cambridge men may become Hon. Members of the Society on making application.

No subscription is required, but Hon. Members are asked to become subscribers to the magazine of the Society which is published terminally, and will be forwarded post free for the coming academical year on receipt of 5s.

The magazine is a purely scientific journal artistically produced, containing articles by leading members of the medical profession, together with the news of the Cambridge Medical School.

It is hoped that the magazine, which has a circulation in Cambridge alone of over 500, will afford an excellent means of linking up old Cambridge men, who have "gone down," with their Alma Mater.

Short articles, correspondence, etc., for publication, will always be welcomed, and should be addressed to me as under.

Application for Hon. Membership of the Society together with subscriptions to the magazine should be forwarded in the first place to me at Downing College.—Yours faithfully,

E. S. FELLOWES-FARROW,
Editor.

Downing College,
Cambridge.

Woodhall from Within.

The old Guy's Staff of thirty years ago were greatly sceptical as regards hydropathy and spa treatment. They carried their antagonism perhaps rather too far, out of, I think, a spirit of sincerity, a bluntness and hate of humbug which fortunately has been a tradition of our great School. When Bath was mentioned to Dr. Pye-Smith, I remember his referring his enquirer to the "Pickwick Papers," and to Sam Weller, describing the water as lashing like "a tepid flat iron." No doubt there may be much humbug at some of these places, and patients may be cured by the "higher bluff," in other words, by auto-suggestion.

This is not the case with Woodhall Spa. The place is a mere village, the villas and their arrangement reminding one of a garden suburb. The establishment itself looks like a golf house, and is situated in a kind of park. No fuss is made of an arrival when he enters the hall and gives up his prescription, previously obtained by a consultation with the doctor. Only one or two baths are allowed without a permit from the doctor. The doctor in charge of the establishment is quite unlike one that imagination would associate with spa treatment. He is young, quiet, careful, and obviously capable. His kindly advice and directions are more likely to be obeyed and to carry weight with a really sick person than a more demonstrative type of personality. Personally I obeyed him to the letter, and effected a cure in three weeks. I should describe him as the right man in the right place.

My partners were "fed up with me," for I had been ailing on and off in bed during the spring of 1922. I ended up with some gastro-intestinal affection, which quickly demonstrated itself in an attack of acute rheumatism, with pyrexia lasting ten days. I was a poor thing, easily fatigued, with a painful ankle, an aching back and occasional cramps in the neck muscles. My second cardiac sound was re-duplicated.

I was surprised to find Woodhall so quiet, in fact, such "a dead and alive place," and wondered why people came there. The solution is that those who go there are *really bad* and come for treatment, not gaiety. I found that among many were people of small means, who had to save up for the excursion, and some could only afford to come every second year. These were cases of rheumatoid arthritis, old stagers, who had tried other places, but only benefitted by Woodhall. The other cases were those of bronchial catarrh, and a few cases of recurrent conjunctivitis. There was a "loco motor" staying at my hotel, and he decidedly improved in his walking, possibly because the functional part of his disability was removed.

Here is an analysis of the water:—

	Grains per gallon.
Pot. Iod.	.5377
Pot. Brom.	3.5133
Pot. Chlor.	1.3573
Sod. Chlorid.	1406.1040
Mag. Sulph.	5.9150
Mag. Chlorid.	38.3960
Calc. Chlorid.	105.5950
Silica	.6860
Iron Oxide and Aluminium	.3740
Total Solids	1562.4783

The water is distinctly sedative, and it is a little difficult to see how such small quantities can have an effect. It must be borne in mind that calc. chloride is sedative as well as the three potassium salts.

Dr. Boys informed me that no results are obtainable by an artificially composed water, so some allowance must be given to nature's laboratory.

My treatment consisted in taking the water diluted, hot before breakfast. At 10 a.m. I entered a deep, hot bath for 15 minutes, and was then rolled in hot towels. At 11 a.m. I returned to my hotel, took another peg of the water, laid on my bed and slept soundly till 1 p.m. The rest of the day I had free. The effect of the bath was quite remarkable, different quite to an ordinary hot bath, for I

walked (or limped) quite fresh down to the establishment. After the first seven minutes I became sleepy, then the attendant re-heated the water and left me to complete the fifteen minutes. I walked back from the bath limp and tired and glad of the sleep on my bed.

For the first three days I was so stiff that I had to be helped in and out of the bath, after which I was able to do for myself. I was ordered a bath daily for the first week, then on alternate days, the third week baths, alternating with general massage. At the end of my course I was free from all stiffness and pain and able to do a six miles walk, which I worked up to by gradations.

I had sent many patients to Woodhall before I went there myself and all had benefited. I have also had good results from Droitwich. Of the other Spas I have had little or no experience. Since my return I have sent a lady with rheumatism to Woodhall. She has so benefited that she has decided to go there again next year.

I have stated that there are no "amusements" at Woodhall. The patients there all say, "a good job, too," for they are out for quiet and rest and they certainly get it. I should say that the active, fussy neurotic would benefit enormously. The place itself and its environs are pretty, wooded, with heath and open spaces. The fens are near and have a peculiar charm of their own. There are daily excursions arranged to visit such interesting towns as Boston, Spalding, and Horncastle, while Skegness ("which is so bracing") is within reach by the motor. Lincoln is eighteen miles away and can be reached by motor or train.

William Cobbett remarks in his "Rural Rides" that Lincoln Cathedral is the finest building in Europe. We discussed this statement at my hotel and felt inclined to agree with him.

The big hotel at Woodhall was burned out a few years ago; only small ones remain, but they are comfortable, and the food suitable and good.

There is a gentlewoman's home, terms 25 to 30 shillings a week, and an admirably appointed hospital at the same charges, which include massage.

I write this short notice out of gratitude to Woodhall in general and Dr. Boys in particular.

A. PERCY ALLAN.

Change of Address.

Stephen Coffin, 23, Harley Street, W.1.

Frank Cordeux Wetherell, M.B., Broad Oke, 7, Burlington Road, Ipswich.

Geo. L. L. Lawson, Church Street, Pymble, New South Wales, Australia.

Rolf Creasy, 25, Devonshire Place, W.1.

Rolf Creasy, Jnr., M.B., B.S., 25, Devonshire Place. W.1.

NOTICE.

The Editor has great pleasure in announcing that the next issue of the "Gazette" will contain the first instalment of a thrilling drama of real life entitled "Pursued by Bandits," being the true story of the attempted victimisation of a Guy's Doctor by two of the most audacious and bloodthirsty rogues in the South of London. Readers are advised to order their copies now, that they may avoid the risk of missing this astounding story, which will be related in full from the moment when the victim was first entrapped to the daring and heroic rescue by picked men of the Hospital special constabulary, led by a clinical assistant.

ORDER NOW.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

OUR remarks in the last issue regarding the Panel System have provoked some rather adverse criticism, and we welcome the opportunity of explaining more fully one or two passages which have, we feel, given rise to misunderstanding. While the doctor of the case we quoted was referred to as a panel doctor, we were not quite so ignorant as has been inferred. Perhaps the wording of this passage was susceptible to misinterpretation. We certainly did not wish to infer that the child was a *panel* patient, but rather a *private* patient of a panel doctor.

We know from personal experience that fatigue, induced by overwork, is responsible for sins, both of omission and of commission. This is true in all branches of life. Our intention was far from dwelling on the mistake of any one doctor and labelling it as atrocious. Panel patients are, we feel, inclined to consult their doctor more often than is the case with private patients, who, in most cases, pay an extra fee for each visit. This would, with a panel doctor, give rise to the overwork upon which the blame for some omission or commission must be laid.

We are glad to say, however, that two of our correspondents are in agreement with our main contention that a change in the system is necessary. To assert this is, we may point out, a condemnation neither of the system as a whole nor of those practitioners who are engaged in its work.

No doubt our correspondents will agree with the statement that the treatment received by a patient in a large general hospital is, as far as can be, a model one. Now there are very few of these patients who do not come into contact with the work of one or more of the special departments, such as those of pathology, chemical pathology, bacteriology, or radiography. Sometimes, moreover, a specialist, maybe a laryngologist, an ophthalmic surgeon, or a cardiologist, is called in to see a case in the general wards. Granted that such a condition of affairs where the aid of every branch of medicine, and of its subsidiary sciences, can be invoked, is a model one, could not such facilities be extended to every case? True, a great deal of this work is at present done by general practitioners themselves. But in view of the ever-present extension of some part of the medical curriculum the average student cannot be expected to become *expert* in the art

of *every* special department and of pathology, bacteriology, radiography, etc.

"We hope," says Dr. Edwards, "for developments in the near future to help us (the General Practitioners) in the way of Specialist services, such as X-ray diagnosis and pathological laboratories for a start."

Mr. Layton also agrees with us that a change in this direction is probable. But he has in mind, we presume, only the existing specialists. We put forward, on the contrary, the suggestion that extra facilities should be provided *in general practice* for those who wish to specialise to some extent in pathology, bacteriology, or some other particular branch of medicine. The outcome would be that instead of being on his own the general practitioner of the future would, together with two or three specialists, be one of a team each of whom would have some interest in the patient, as we have shown to be the case in hospital practice. Such a scheme would, we feel, be not only of advantage to the patient, but would also provide an increased incentive to many medical men.

We hope we have dealt with most of the points which appear to have given rise to grave misapprehension in the minds of some of our readers. Finally, as the implication has been cast upon us, and in order to relieve the curious mind, we would state that the much maligned article was not written by an unqualified student.

Interest in the near approach of the Hospital Football Season is intensified by the fact that this November marks the centenary of football as played under Rugby rules. Its birth was due to the irregularity of play on the part of a Rugby boy, William Webb Ellis, whose exploit is thus perpetuated on a granite slab placed on the wall dividing the Close from the Headmaster's garden :—

This Stone
Commemorates the Exploit of William Webb Ellis
Who With a Fine Disregard For The Rules of Football
As Played in His Time
First Took The Ball In His Arms And Ran With It
Thus Originating The Distinctive Feature of The Rugby Game
A.D. 1823

The start of the season will find the ranks of the Football Club sadly depleted. Some of the most outstanding players have left, while others have passed out of their year. We have no fears, however, as to the part that will be played by the teams throughout the coming season. The traditions of Hospital football have been left in worthy hands, and we have no doubt that more talent will rise to fill those places which have been left vacant. It is hard to imagine any sides as good as those of the last two years, but although, in the future, the teams may not score so many points or bring back so many cups, we feel sure that they will adequately maintain the spirit of true sport which has always been the tradition of Guy's football.

As was stated in a previous issue, the Biennial Dinner will be held at the Connaught Rooms on Wednesday, October 17th, at 7 p.m., with Mr. G. Bellingham Smith in the Chair. This occasion, we need hardly emphasise, is one at which all Guy's men should strive to be present. We print in this issue a further letter from Mr. Ormond, who is arranging the Dinner, and we trust that all who possibly can come will do so.

On page 362 we publish a letter from the Secretaries of the Guy's Hospital Musical So-

ciety. An appeal is made for support in the re-establishment of this Society upon a firm basis. Many will wonder, no doubt, what the Society is, for, during the last year or two nothing has been heard of it. It appeared to have sunk into a peaceful oblivion. But the days are not far gone when it was in its prime, and we are pleased to see the effort which is now being made to revive it.

In the event of this effort being crowned with success, a departure from ancient procedure will be made, and instead of the usual concert an opera will be performed. On the whole, there is a great deal of apathy shown to such ventures, but we sincerely hope that such will not be the case with the Musical Society. The redemption of the debt on the Nurses' Cottage at Honor Oak Park is another incentive for the support which should be forthcoming.

On First Looking Into the New Dissecting Room.

(With the most humble apology to the immortal Muse of J. K.)

Much have I travailed learning of the Dead,
In airless and in stifling rooms I've been;
And many blood-stained tables have I seen
Where carcasses the priests for Pluto spread.
To one bright, sunlit room my thoughts have sped
Which the High Priest might rule as his demesne;
Yet did I never breathe its pure serene
Till I a guest to this New Room was led.
Then felt I like some selfish child when things
Are given to its brother of great price;
Or like Icarus when with melted wings
He sees an aeroplane and, with the wise
Old Daedalus, of that strange engine sings
Marv'ling, upon a harp in Paradise.

R. L. W.

Papers by Guy's Men.

C. Worster Drought, M.D. Case of Birth Injury to Brachial Plexus; all cords of Plexus originally involved; Recovery of Function in Outer and Posterior Cords: Paresis now of Infraclavicular or Klumpke Type.—Proc. Roy. Soc. Med., xiv., 1923, Sec. for the Study of Dis. in Childr., 73.

——. (1) Case of "Juvenile" Tabo-paresis; (2) Case of Juvenile General Paralysis of the Insane; (3) Case of Huntingdon's Chorea.—*Ibid.*, Sec. of Neurology, pp. 81—82.

H. W. Barber, M.B. Case of Urticaria Pigmentosa.—*Ibid.*, Sec. of Dermatology, p. 94.

——. (1) Case of Dermatitis Repens and Infectious Eczematoid Dermatitis, with involvement of the Mucous Membranes; (2) Case of Atrophic Dermatitis of the Hands and Feet. ?Lupus Erythematous.

C. Gill-Carey. Case showing results following the accidental swallowing of Sulphuric Acid in a patient with Syphilitic Laryngitis.—*Ibid.*, Sec. of Laryngology, p. 67.

W. M. Mollison, M.Ch. Case of swelling in the Nasopharynx on the Right side, displacing the soft Palate downwards.—*Ibid.*, p. 68.

——. Case of Vertigo cured by opening the External Semicircular Canal.—*Ibid.*, Sec. of Otology, p. 60.

W. H. Ogilvie, M.S. (1) Case of Renal Dwarfism; (2) Specimen of Synostosis of Phalanged Joints. ?Congenital in Origin.—*Ibid.*, Sec. of Orthopædics, p. 51.

T. Izod Bennett, M.D. The Early Diagnosis of Cancer of the Stomach by Means of Gastric Analysis.—*B.M.J.*, 1923, i., p. 275.

J. A. Ryle, M.D. Case of Erythrœmia (Polycythæmia Vera, Vaquez-Gler's Disease), with Cerebral Hæmorrhage.—Proc. Roy. Soc. Med., xvi., 1923, Sec. of Medicine, p. 83.

C. P. Symonds, M.D. Case of Muscular Atrophy of the "Peroneal" Type apparently commencing in, and confined for some time to, the Right hand.—*Ibid.*, Sec. of Neurology, p. 80.

Bright's Disease.

The way in which the name of Richard Bright is dragged through the dust and mire of the medical literature of the present day, is unworthy of a man, whose scientific attainments and research, placed him at the head of the Profession of his time. More especially is it an opprobium to his memory at Guy's, whose duty it is, as far as possible, to keep his memory clear from the fog and haziness which now surrounds it. There were not then the many adequate means, as now, for circulating a new discovery before the whole profession. In this cause, lies, I think, the reason of the want of accuracy, so commonly noticed, when men speak of Bright's Disease. His contributions were, more or less, buried in the the Guy's Hospital Reports, and so have been read by a limited number only.

Hidden as they are, they bear testimony to his modest worth and accurate logical mind. These valuable articles, containing the descriptions of his original research, have become gradually more or less forgotten, and therefore, more and more misunderstood, by the wider circle outside the readers of "The Guy's Hospital Reports."

But to Guy's men his papers in the "Reports," and the excellent illustrations were long looked on as shrines, to which all future generations of the profession might go who sought accuracy of knowledge both in writing and teaching. But how many read them now?

For very many years afterwards, it was a point of honour to limit the name of this disease to the one class of case which Bright described, that is, to those nearing old age. whose urine began gradually to contain albumen. He demonstrated it as the first symptom of the onset of this degeneration of old age and depicted also the condition of kidney which caused it.

So long as the patient had albuminuria due to change in renal structure, it was "Bright's Disease" to these latter day pathologists. It mattered not whether it was acute nephritis or lardaceous disease, it was all Bright's disease.

In one modern (1922) educational work now before me I read that Bright's disease is "Acute or chronic inflammation of the kidneys, may be due to cold or wet, scarlet fever, swallowing poisonous drugs, etc. It arises in the course of pregnancy, gout, and skin diseases." This, obviously, is simply "albuminuria" with or without any change whatever in the renal structure. In fact no real disease, but temporary congestion only. Sometimes over tension, or obstruction of circulation.

The name, "Bright's Disease," was given to this degeneration to mark the respect in which Bright was held by his colleagues and contemporaries.

In this generation, when men are *sometimes* belauded and betitled for work, not really their own, but filched from the brains of other workers, it is a pleasure to turn back and contemplate a man who was willing to accept the good opinion of his fellow-workers as the fitting reward for a well spent life. These men thought that the name of Bright would be honoured and immortalised by bestowing it on the old age degeneration which he had done so much to investigate and explain.

It was instructive, at times, to see the look of scorn on Sir Wm. Gull's face when he heard his ward clerk apply the term "Bright's disease" to some youthful subject of dropsy. It is narrated in a former number of this GAZETTE, how Sir Wm. Gull turned away in disgust on being shown, by the House Physician, as a curiosity, what he called a case of Bright's disease in a boy.

It was a lesson in gentleness and fellow-feeling also to hear Wilks try to impress upon the minds of his hearers, the important point that it was not albuminuria which constituted the main factor in Bright's disease, but old age. He used to tell students that Aitken's Medicine was the only one left which did not include Bright's disease under Diseases of the Kidney. I believe, however, later on, Aitken joined the heretics. In my opinion, before any writer on Bright's disease puts pen to paper, he ought to read Bright's original articles in the "Guy's Hospital Reports" of that time. The presence of albuminuria, he said, was as a symptom only, indicating the commencement of an incurable degeneration, not of the kidneys alone, but the entire body. He would say it was a misplacement of ideas to classify Bright's disease amongst diseases of the kidneys because there was albuminuria, and a diseased condition of the kidney. The kidneys being involved was consequent only

on their being part of the body. It was not limited to the renal structure. As well might renal tuberculosis be called a kidney disease, when the kidney is involved in general tuberculosis. Its structures are certainly diseased, but tuberculosis is not a modification of renal tissue only: it equally affects all organs of the body.

The same may be said of fatty kidney. But we speak only of fatty liver, fatty heart, because fatty degeneration is the essential primary point, the organ is secondary. Fatty degeration is not a primary disease of the kidneys, nor of the liver. Neither is tuberculosis secondary to the kidney; nor are other general conditions. They are not classified as under the names of the organs affected, but under their special general character. Fatty disease is a change, common to all organs and structures as a degeneration. Tuberculosis also is classified amongst the microbic invasions.

It is true that the special way in which each and all of these general diseases influences special organs requires separate consideration, but that is a different thing to limiting them, in class, to one special organ. So with Bright's disease, it affects the kidney, but it equally affects other parts; it is not specially a kidney disease. Inflammation affects the kidney and requires treatment, but inflammation is not special to the kidney. The kidney is of importance in Bright's disease because it is the first organ to show the presence of the disease. but other parts are equally affected. The essential feature of Bright's disease is "old age." Therefore, under "Diseases of the Kidneys" may be put "Bright's Disease of the Kidneys," but not "Bright's Disease."

As the changes which this degeneration of old age makes in the kidney structure are so marked and characteristic, it is quite admissible that they should be described and depicted amongst the diseases proper to the kidney, just as lardaceous, fatty and other general degenerations are, but one would never think of saying that lardaceous degeneration or fatty degeneration are essentially a kidney disease, any more than they are liver diseases. It would be a great surprise to us if some writer classified lardaceous, fatty, or Bright's disease as "Diseases of the Liver," because we have not grown accustomed to it, but it would be just as warrantable. Their classification and description should be under a separate heading of "General Diseases," but their special way of attacking the different organs and tissues should be described in the chapter on the diseases of those organs.

It was this special point which was so emphasised and dwelt upon by Gull, Wilks and others. They spared no effort to limit the term "Bright's disease" to the old age degeneration only, not as affecting one organ, but universally prevalent. Bright himself, as far as he could, showed how the disease could be first recognised, and, had he lived longer, would have no doubt traced its later developments.

As the memory of Bright faded, the distinction between the terms "Bright's disease" and "Albuminuria" became less distinct. They were both looked upon as referring to the kidney alone and significant of no single definite condition.

It may seem to many that more honour is thus brought to the name. Not so, his contemporaries and colleagues referred to one disease only:—old age degeneration.

The generation following them, as a matter of honour to Bright, limited the term specially to the chronic albuminuria associated with the small red kidney. These were characteristic of the degenerative condition of old age.

The large red, the large white and other morbid conditions were not included. Bright's disease was productive of the small red contracted variety alone. It had no acute stage. Acute Bright's disease is a contradiction of terms. The disease is a definite and well marked condition throughout the entire body, but the kidney is the first organ to give any sign of its onset, and thereby becomes, in a way, specially associated with it by allowing the blood albumen to permeate through the altered coats of its degenerated tubula. Beyond this it has no selective preference for the kidneys. The name, "Bright's disease," is a good one, as it implies no special pathology, and it is not wedded to any particular line in morbid anatomy. Later writers tried to give a name indicative of their views of the changes that take place, such as arterio-capillary-fibrosis, but this is not always a wise course, as improved methods, and a deeper insight into Nature's laws may, later on, suggest more accurate terms. But the term "Bright's disease" fixes the meaning only to the condi-

tions which Bright described and depicted, and of which he was the first to make known and explain the significance. He showed that if constant albuminuria be detected in old age, associated with a certain appearance of the kidneys, it foretells a definite, certain and progressive degeneration.

Some would have it called, at first, a disease of the arterial walls, and they suggested atheromatous degeneration as a better name. At this stage, however, it would be classified amongst "Diseases of the Blood-Vessels."

But there were others, adept in auscultation, who found that there were great changes going on also in the heart, and that the thickened arteries were but an effort of nature to strengthen the vessel walls in resisting the greater strain on them by the enlarged heart. These were of the opinion that the disease should be classified amongst "Diseases of the Heart," rather than the blood-vessels. They saw the origin of it all in the heart, the blood-vessels being affected secondarily. There is an interesting discussion on this point between Sir Wm. Gull and Dr. Johnson, of King's College Hospital, in the medical papers about 1873. They differ as to which is the primary change, the heart or the arteries?

I regret to say that the sympathy of Guy's men was chiefly with Johnson's views. It was in this discussion that the term just mentioned, arterio-capillary-fibrosis, was invented to more accurately define the morbid anatomy of the changes taking place.

But when these patients were lost sight of, over whose kidneys, arteries and heart so much ink had been wasted, whilst they were under observation in the hospital, the heat of battle cooled and was forgotten. But their tissues went on degenerating, and losing their elasticity, more and more all over the body, until the arteries resembled friable old rubber, rather than the flexible vessels of days gone by.

In this rotten state they depended more on the support of the structures around them than on their own strength. The vessels, therefore, circulating among the brain membranes were in a very precarious condition. At last, however, one of these, under temporary extra pressure, burst, and the patient fell down, in a helpless heap, dead. The cause was registered as due to apoplexy, one of the "Diseases of the Brain." The final verdict was as true as the last. The patient had run through the whole series; suffering first from Disease of the Kidney, then of the Blood-vessels, then of the Heart, and then, finally, of the Brain.

It is quite true. Go and look at your text-books. There are some modifications here and there, attempts to reconcile discrepancies, but it is evident that the various phases are but different aspects of one disease, and that the real true name is the same at the first as at the last. How much better to stick to the one name "Bright's disease." The whole truth is there in a nutshell, but do not put it among "Diseases of the Kidneys," or any other local class. All the organs are included in the disease according to the stage it has reached, but it is limited to none.

The last time Wilks spoke to me on the subject he said, in a very feeling tone, "It is no good, I have tried all I can to teach and show men the truth, and explain to them that Bright's disease is *not* a disease of the kidneys, but a constitutional degeneration in which the kidneys are implicated like other parts, but it is of no use. I find it now in the text-books and men are taught that it is one of the 'Diseases of the Kidneys.' The examiner wants it, so I suppose I must teach it, but Bright's disease is no more a kidney disease than a heart disease."

No one knew better than Sir Fredk. Taylor the morbid anatomy of Bright's disease as he heard it taught at Guy's, almost direct from Bright's own lips. But in his work on Medicine it seems to me to stand as it were apologetically on the very edge of his list of "Diseases of the Kidneys." Did he ever hear, I wonder, the mournful words of Wilks, just quoted. To describe Bright's as a kidney disease is to put the kidney in a false position; instead of the honourable one of being the pioneer, the trustworthy scout, long in advance of other symptoms, it is misrepresented as trying to include the whole. This "Degeneration of Old Age," the forerunner of the crumbling of the noble powers and brilliant attainments of a bygone day, is only as much a part of the kidney as it is of the heart and some other organs. But it attacks the kidney's most tell-tale spot those fine tubules and folded and intricate convolutions in which the delicate work of secreting the urine is carried on. Therefore the earliest change in structure disturbs that fine balance of secretion which is what we see in the altered urine; one even

suspects altered tension alone will be sufficient to predict the alteration of structure. But the degeneration of the heart and other organs has no delicate index like the urine to indicate their altered condition and degenerate function.

To the kidney is due the honour of being the first indicator by far, but there its claim ends. It advances, *pari passu*, with the progressive decay of the other organs affected. The kidney has no more claim to Bright's disease as one of its own special diseases, than carbolic acid to assert itself as the *fons et origo* of antiseptic surgery. It had an honourable and leading position in the beginning, but it had to give way to later knowledge.

Let Guy's men see to it, that a wider and more comprehensive view is given to the term "Bright's Disease," to replace the present narrowed meaning, and so let justice be done to the memory of one of Guy's greatest men, and of his successors who bestowed the man's name on the disease, and who, after his death, worked so strenuously as his champions, to restore the proper meaning to the title and name, and thereby to do justice to the memory of the immortal dead.

R. C. C.

The Note-book of a Guy's Student.

Recently I have become the possesor of an interleaved book entitled "A Syllabus of the Lectures on Midwifery delivered at Guy's Hospital and at Dr. Lowder's and Dr. Haighton's Theatre in St. Saviour's Churchyard, Southwark."

The book was reprinted in London in 1799, and the interleaves fully written up by Thomas Gething Williams who practised the art of medicine for many years in Swansea.

There is one interesting note on the "Diseases of Infants requiring medical treatment," of which Williams has written, "It must be evident that it is a difficult part of medicine, consequently Practitioners do not much like it, the causes of complaints not being at all evident, not being able to get any information respecting them as an adult can give you, it is common to ask the nurse questions. They often form opinions of their own of the causes, and would mislead you, therefore do not suffer your judgement to be misled by them, only ask questions of the feeding of child."

"A set of questions laid down which are to be asked in all cases, which are respecting the actions of child. Whether it draws its knees up which is a sign of Gripes. If it puts its fingers to its gums and pull them about, a sign of teething. If it picks its nose, is a sign of irritation of the intestines, as worms. Fretful and puts the hand often to the head and shifts it about often it may be hydrocephalus."

The punctuation can hardly be said to be first-class, whilst the simplicity of the diagnosis is such as to appeal to the most tired student in the University!

With regard to Cæsarean section he writes, "It is impossible to say how many would recover it out of a number, but the probability is from the injury necessarily done in the performing of it that but one out of a number would be saved. Many have thought that the admission of air into the cavity of the abdomen did the most injury, and was the principal cause of death in those cases, but Dr. Haighton does not think so and has proved by experiments in animals that air does not do the mischief, but that it is the injury done to the parts otherwise is the cause of death."

If Dr. Haighton had but carried on with his vivisection experiments it is quite possible that Guys might have been in the position to claim the honour of having enunciated the germ theory, though on second thoughts I think that even with that "if," the credit belongs to an Englishman named E. Maynwaringe, Doctor in Physick, who published a book in 1673 on "The History and Mystery of the Venereal Lues or French Disease."

He tells us in this book "To the act of Infection there are three *requisites*. the person or body *infecting* that does communicate, Secondly the virulent Miasm transmitted or communicated. Thirdly the person infected."

"In the next place we are to consider what these miasms or infectious seminaries are that pass from body to body. Some call them *vapour* others a *spirit*, but we shall not trouble our selves upon the name, provided we rightly know what is meant thereby."

"We are therefore to understand them as *corpuscles* or subtile finer invisible bodies, which are minute small portions, exhaling from infected bodies of the same nature and taint as

the bodies from whence they were emitted. These venenous *particles* of contagious matter are agile and penetrative, that they insinuate themselves through the pores of other bodies; and being entered do then ferment and operate to alter, and change their new *receptacles*, and *tincture* them with the like *labes* of their own virulent nature."

Is Maynwaringe an old Guy's student? If so the Hospital can still lay claim to one who, in the above quoted words, has been undoubtedly the first to enumerate in unmistakable terms the fundamental idea underlying the modern germ theory.

In 1672, or over 250 years ago, just after the Commonwealth had become a matter of past history, this unrecognised genius enunciated the theory which in the hands of Lister and his pupils has changed the whole outlook of surgery as well as of medicine.

Hear what he has to say of *phthisis*—"and as for a *phthisis* why that should be infectious to the lungs of another, there is good reason for it; because the *corrupt* breath going out of the *phthisical* person, is drawn in and received by another, and having imbibed *phthisical* corruptive *miasms* in the breath, may lodge and fix there, changing the natural *tone* of the lungs into a *tabid* and corruptive state."

Turning back to Gething Williams' note-book one finds a few words on "Lues Venerea" in infants, and it is interesting to note that Dr. Haighton uses the same nomenclature as Maynwaringe—the Veneral Lues.

"The 3rd Division is those diseases that make their appearance after Birth as Venereal Disease. A case of this kind would be more equivocal in an Infant than in adults, as they inform you of circumstances by which you could decide that it was such, in children you are not to expect sores on the genitals more than on any other part, they receive it from the mother, therefore it is in her power to throw some light on it. They will be candid sometimes and say they have been injured by their husband."

One cannot but feel that the information communicated to Gething Williams as evidenced by his notes is very imperfect (although he writes fully), and compared with the very full information which we get from Maynwaringe in 1673 it is very unsatisfactory.

Maynwaringe points out how syphilis in infants is either "*hereditary* or *adventitious*," but to a student like Williams no such like distinction seems to have been made.

Williams tells us that "Dr. Haighton recommends all to be backward in recommending wet nurses as they are always more troublesome than other servants, give themselves airs, &c., and their characters may be had as to the health of the woman and the goodness of milk cant say that will be proved from the effects on a child. Should never recommend any so as to be at all responsible for them.—might be diseased. An instance of Dr. Orm getting into an escrape by recommending a Nurse who had the venereal disease. She gave it to the footman, and he to the House maid. The master was likewise fond of the Nurse She gave him the venereal disease, and he gave it to his wife the mistress."

With this tale the notes end, but on the last page are printed the Regulations for midwifery students on the District.

1. Each gentleman will have labours in proportion to the number of courses he subscribes to, and will be served in rotation as nearly as the nature of things will allow.

2. Before any gentleman is called upon to act he will have an opportunity of attending the lying-in-house, where he will have the means of acquiring the necessary preparatory knowledge.

3. No gentleman who has been called upon to attend a labour either at the lying-in-house, or at a private house, can be permitted to take with him another who has *not* been called to it; nor can he send another in his stead.

4. Notice to be in readiness to attend a labour will (when time will allow) be given to each gentleman, either by verbal message or in writing; and it is recommended to him to accept of the offer if possible; in any case a decided answer is expected.

5. Every gentleman engaging to attend a labour when called on, will (agreeably to his own promise) be expected to hold himself in readiness for that purpose; but in case of failure, and it becomes necessary to send another in his stead (a circumstance that must always be attended with vast delay and much inconvenience, and often danger to the patient) the gentleman committing such neglect

forfeits one labour from the number allotted to him.

6 Every gentleman who goes to a labour is expected to stay until it is finished; but in case he is called where the patient is under a mistake, he may leave her, having previously taken proper methods to acquire the necessary information. In this case it is recommended to him to call on her again soon, and in case of disease Dr. Haighton should be informed of it.

7. In cases of difficulty or danger during labour, the gentleman attending is requested to send, if possible, a written message to Dr. Haighton; but he is on no account to leave the patient.

8. It is recommended to each gentleman going to a labour to have with him an opiate, and some common aperient medicine, such being frequently wanted after delivery.

9. As every gentleman undertaking a labour necessarily pledges himself to attend the woman during her recovery he will consequently see the propriety of calling on her each day until she is in a perfectly safe condition, and in cases of serious indisposition Dr. Haighton should be informed of it.

10. In attending labours at the lying-in-house where there is usually more than one gentleman present, it is particularly requested that all conversation tending to excite apprehension in the patient be avoided, such as descriptions of bad labours, anatomical dissections, the state of their experience in obstetrical subjects, &c.

One fancies that "the state of their experience" might have a most terrifying effect!

G. A. S.

Change of Address.

Capt. G. Covell, I.M.S., c/o Messrs. Grindlay & Co., Bombay.

Maurice E. Shaw, 20, Rue Sarette, Paris, xive.

W. H. Ogilvie, M.Ch., F.R.C.S., 13, Wimpole St., W. 1.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

"Pursued by Bandits"

(A True Story with a MORAL.)

It had been a tiring day. Absorbed in his copy of the last GAZETTE, the Guy's Doctor sat in his consulting-room, oblivious alike to the happy laughter of the Maze Pond children and the folk-songs of the Borough peasants, which came to him through the open casement. A panel doctor at the end of a hard day's work, nothing lay before him but the composition of something sharp and snappy for the author of the last "Passim." There was scarcely a ripple on the serene surface of the Pond. His evening promised to be one of fire-side bliss. His wife had already begun her knitting. But so it is that, just when life is at its best, and the H.B.F.s of the tortured soul have given place to the soothing unguents of homely peace, fate, that most reprehensible of all dressers, steps in with a septic probe and starts the agony afresh. In other words, life is just one darned thing after another, and the Doctor had hardly got further than the third page of Editorial abuse, when one of his butlers announced, "A gentleman from the Insurance Company, sir, to see you by appointment."

The Doctor sprang from his chair and advanced with outstretched hand to greet a distinguished-looking gentleman, who, recovering from a low and courtly bow, disclosed a smiling, florid face surmounting a short, rotund body.

"I have considered your proposal," said the Doctor, as soon as greetings had been exchanged, "and am prepared to examine any clients, that you may send me, at the terms offered by your Company."

"Delightful," replied Mr. Thorpe-Johnson, for that was the name of the s.f. face on the s.r. body, "I feel sure you will have no cause to regret your decision. You will know how universal insurance is in these days of peaceful civilisation, being so fully secured yourself. What? You are not insured? Have you never considered how galling it would be to pay from your capital a fellow-practitioner to run your practice should you unhappily be the victim, of fire, disease, accident, burglary, or sudden death? Now my Company can offer you the most generous terms. For the small sum of two pounds down, and a further paltry eight pounds in a few days' time, you can se-

cure yourself against all risks from the moment that I give you my receipt. Why hesitate? Do it to-day. Who knows what the future holds in store for you. There is many a young practitioner that I have helped in this way before."

"My friend," quoth the Doctor, "your generous offer attracts me. Dare Quam Accipere." With which words he handed over a cheque and the bead of perspiration, which had been slowly gathering on the brow of Mr. Thorpe-Johnson, dropped silently and unperceived upon his ample bosom.

"There is one little point, Doctor, on which I should like to lay stress. My Company is very opposed to intemperate habits and is averse to treating as a first-class life even the moderate drinker. I feel sure you will see the propriety of this and will subject any such person to a more than usually rigid examination. I hardly ever touch spirits myself, but since you insist, perhaps just the smallest drop. I beg your pardon. Oh yes, certainly; 'when.' I did not notice that you were pouring it out. No, pray don't trouble to pour it back. The nights are getting very damp. You cannot, I suppose, call to mind any other medical man like yourself, who would be willing to carry on work of this nature? I am very anxious to extend my connection in the south-east area of London. Should anyone occur to you, you might mention him to me. I shall be 'phoning you in a few days in reference to your first client."

With that he bowed himself from the room, or would have done, had he not most regretably bowed himself into the sterilizer instead.

* * *

[The exciting part will now begin. All that stuff was only by way of introduction, so that you would know what it was all about. Do you?]

* * *

Ten days had passed. The Guy's Doctor sat in his consulting-room and on his brow was writ the word "SUSPICION!!!" You know how these things come about, reader. One day you wake with the certain knowledge that your entrails are filled with molten lead, and you visit the Surgery, a mixture of agony and confidence. The nurse sees you, smiles at you, takes your temperature, shows you into a small room ,and tells you to wait. You do. Scores of busy-looking men come into your room, look at you, say, "Wait a minute, Dad," and walk out again. From time to time, the nurse comes in to smile at you and so keep your confidence at top weight.

Presently a young man in a grocer's apron comes in, asks a lot of questions and stirs up the molten lead with both hands. Confidence breaks all records; you are in or under the hands of the doctor. But no; he goes out and calls in another assistant from the grocery department. More questions, more abdominal massage and a back-chat interlude by the two of them on what to do. Confidence drops to normal. Several others drop in now and ask after your wife's chest and whether you have any home troubles. This leads to a further debate, the outcome of which is that you are not to be worried, are to keep as quiet as you can and are to receive——a card! The ugly head of suspicion then rears itself for the first time, and you go out to see a real doctor.

So it was with our hero. (The Guy's Doctor, who sits in his consulting-room, is our hero.) Any misgivings as to the soundness of his bargain, that the cold light of day might have brought, had been quickly dispelled by the arrival of a client to be examined for his insurance policy. True, he was not alcoholically a first-class life, but, like the man in the apron, he was something solid, and radiated confidence. But, when he had gone, came the long days of waiting. No one came to smile at him. Mr. Thorpe-Johnson might have been smiling, but he did not look in to say so. Nor had any official acknowledgment of the balance of his first year's premium been received from the Company. Suspicion, once aroused, could not be allayed, and a visit to the Company's offices had elicited the knowledge that Mr. Thorpe-Johnson's reputation with the firm was already established, while his acquaintance, though greatly desired, had yet to be made.

From then on the Doctor had become a sleuth. Sherlock Holmes was the same sort of thing, but he had to hand it out to the Guy's man when it came to brains. Besides which, our man did not waste time playing his violin. He had just sent to the headquarters of the Hospital Special Constabulary and ordered a sergeant of great cunning and long service. Then they had both sat in the consulting-room and spread out a net for the enticement of the old money-spider, something after this fashion :—

"Dear Sir,

I have been thinking over your suggestion, *re* my taking out a full life-policy under the favourable terms offered by your Company, and have decided that it is too good to be missed. Should you be round this way some time, I should be glad if you would give me a call, preferably by appointment."

That palatable bait was swallowed with gusto, and a 'phone message arranged an appointment for the following Wednesday at nine o'clock for Mr. Thorpe-Johnson and another client for examination. All that now remained to be done was to invite a few mutual friends from the C.I.D. to ensure a really cosy evening.

* * *

Rain fell with the night. Maze Pond, illumined by the fitful flicker of its lamp, was more than usually deserted. The love-songs and crooning lullabies, for which it is so justly famed, were stilled. Two uniformed members of the "M" division, stationed opposite No. 204, were silent, for they were not allowed to sing on duty; furthermore it was not their turn to-night. Not theirs to descend like the avenging fates and sweep with righteous indignation two desperate bandits into the dungeons of the Borough High Street. That was for others to do, and to the rare passer-by they were just two ordinary custodians of the welfare of the street. Nor to the casual observer did No. 204 show evidence that within an hour or two it would be the scene of such stirring events. Yet already the house had interest for two persons at least. Hidden, or rather partially hidden in the friendly obscurity of the ill-lit railway arch—for one of them was not designed by nature to fit completely into so small a hiding-place—the two bandits kept earnest watch. To be sure they had as yet no cause for suspicion, but to one of them anything in the nature of an appointment was a circumstance to be treated with the greatest caution. Soon their watch was rewarded by the sight of yet two more men, walking steadily yet noiselessly up the street. Firm of jaw and eagle-eyed, six feet in height and broad in proportion, they marched along with the regular step of men accustomed to street walking, and if you do not guess who they were, my reader, the L.S.A. is beyond you. Mr. Thorpe-Johnson and his friend knew at a glance, and the detectives, seeing the rounded contour of the former protruding from his hiding-place, recognition became mutual. Here then was suspicion confirmed, and had one side been less skilled in the hoodwinking of notorious bandits, this tale might never have been written. But they were not less skilled, and walked straight past the protrusion with an air of great detachment, discussing loudly Chelsea's chances for the following Saturday. The bandits now did a little detecting on their own account, following their quarry in masterly fashion down Snowsfield to the Borough High Street. Here confidence was restored, and they returned to keep their appointment, paying so many wayside calls *en route* that the odds against the client receiving a "first-class life" prohibited all bets.

Within No. 204 the satisfaction at the arrival of the villains of the piece was to some extent marred by the uncertainty of the whereabouts of the detectives. Would they arrive in time? Would they arrive at all? Anxious eyes might have been seen peering through the banisters, while, from the upper windows, still more eyes took comfort from the vision of the two stationary policemen. They were the eyes of the special squad of Hospital Constabulary.

Our hero had by this time sat for so long in his consulting-room that in comparison Sherlock Holmes had become reduced to the idiotic level of Dr. Watson. His active mind had reduced his plan of campaign to five words; his motto had become: "*I must remove his trousers.*" The greatest actions in life are often the simplest, the most epoch-making events often the most artless. Somebody once won a great naval battle by signalling for help to a fleet which did not exist, and suggestions, equally quaint, have cured many a patient. Knowing these things, our Doctor had decided to capture his client's trousers, arguing with no common logic that no man could run down Maze Pond in the rain and his aertex underwear without exciting remark.

"Good evening, my dear sir," he said to the comic robbers, advancing from the prompt side, "I am glad you were both able to come down. Perhaps you will take a seat in my waiting-room, Mr. Johnson, while I examine Mr. Welwyn in the surgery."

The stage is now prepared for the final scene, but where is the fairy-prince with his fellow-detective? Anxiety within the house is intense, the nervous tension is at breaking-point. And yet, and it redounds to the credit and

good training of the Hospital Constabulary, only in one case was there an actual breakdown. The landlady, who up to then had played the part of a Charlotte Brontë heroine, gave way beneath the strain, and, throwing up one of the windows, beckoned wildly to the police constables. I have already told you that it was not their night, and they were not going to be wildly beckoned on somebody else's night. But the summons was answered, and from a very different quarter. Hurrying down the street through the rain came a very famous clinical assistant. His was the hand that was to turn the scale to the benefit of virtue and to deliver the Doctor from this difficult position. As if in answer to that wild gesticulation he arrived, hatless, breathless, and bespectacled. Who was he, and why had he arrived so aptly in the nick of time? If I am still alive next week I will tell you.

(To be continued).

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,— As a panel doctor I was interested by a note in your issue of September 1st concerning a case of empyema undiagnosed by a panel doctor. That indeed was a terrible mistake, but I see no reason to condemn the panel system on such evidence. I have been a panel doctor ever since the system was inaugurated and have always had a panel of over 3,000 patients and a large private practice in addition. I therefore feel qualified to state that the average time given to panel patients need not be anything like so short a time as is given in the Out-Patient Department. There is no reason whatever that if a medical man be conscientious he cannot do justice to all his panel and private patients. My experience is that the busier the medical man the more careful he is as a rule. He has so much more to lose by carelessness I have known a West End Specialist of high repute diagnose asthma without an examination of the chest. The patient was not asthmatic. This careless blunder does not warrant a condemnation of all West End physicians.

I should be interested to know if the gentleman who wrote the article in the GAZETTE has any personal experience of a panel practice. I consider that the panel doctor who does his work conscientiously (and that type is in the majority) is every bit as useful as the Consultant who charges £3 3s. to patients who can often ill afford the fee. I should be glad if you would find space to publish this letter.

—Yours very truly, WILFORD LEVINSON.

5, College Road, Brighton,
Sept.7th, 1923.

DEAR SIR,—With reference to your paragraph on the shortcomings of the Panel System, may I be allowed to controvert the statements you make there. I am in entire ignorance of the article in the "English Review," and write only as I and others know the work under the National Insurance Acts.

In the first place, the service is a General Practitioner service, and no one else at present takes part in it from the medical side.

Secondly, the bulk of medical men who go into general practice are on the panel under these Acts.

Thirdly, after many conferences amongst all those who are involved, such as the Ministry of Health, Friendly Societies, Insurance Committees and medical men, very few changes are considered necessary, and those of rather minor importance.

In the days before the N.H.I. there were, in the slum areas of, I suppose, all large towns doctor's surgeries where advice and medicine were obtainable for fourpence and superior ditto sixpence. In the East End of London there was a famous threepenny doctor, who turned out to be not a doctor at all, but that is another story which can be found in the records of the police.

What I should like to emphasise is this. Since the institution of the panel, the rate of sickness as compared with pre-Insurance days has dropped from 25 to nearly 50 per cent. (*sic*) amongst the working population.

We hope for developments in the near future to help us (the General Practitioners) in the way of Specialist services, such as X-ray diagnosis and pathological laboratories for a start.

With regard to the case you quote, it is obvious the patient was not under a Panel Practitioner as such; but either as the private patient of the doctor, or as a club patient, or as a parish patient under the Poor Law. Children are not eligible as patients of the National Insurance scheme.

I wish to hold no brief for the man who allows an empyema to go undetected for weeks, although I can hardly agree with you that one thump on the chest would be a better aid to diagnosis than taking the temperature and pulse. It would certainly be quicker.

But it must be that there will be errors of diagnosis even amongst the best of us. We are human and liable to error. May I illustrate a case which came under my care. A lady was operated on in Edmonton, Canada, for malignant disease of the right breast. She returned to England and, owing to re-

currence in the scar, consulted a London surgeon and went through a course of X-ray therapy by a well-known London Consultant. She and her people were assured that there was no sign in her chest of any trouble left and she was placed under my care. On examination I found she had a blood-stained pleuritic effusion in the chest on the opposite side—evidently malignant—and she died in a few weeks.

It seemed to me such a pity that remarks such as those you made were written without full knowledge, the more so as you edit a medical journal.—Believe me, Yours faithfully, C. EDWARDS, M.D.

Elvin House,
Andover, Hants.
September, 1923.

DEAR SIR,—I do not think that overwork is always to blame for the "kind of tragedy" to which you refer in your note to-day on the Panel System. I fear that such can occur even when there is "sufficient time for an ordinary human being to examine his patients properly." Indeed I doubt whether there is any member of the profession to which you hope shortly to belong who has not in the course of ten years made as serious an error in missing an obvious lesion as the one to which you refer. I have always thought my own supreme blunder was when I treated a dislocated shoulder in a farmer's wife with gentian and soda for wind in the stomach; but perhaps my sub-conscious mind allows me to remember this one to the detriment of other diagnostic mistakes which had more serious consequences.

The point, however, which I would make in this letter is that you do a great injustice to a very large number of our profession by suggesting that a record of the pulse and temperature is the only investigation usually made on a patient who goes to see his Panel Doctor; and even if this were true it would not logically infer a wholesale condemnation of the system under which he acts. Imperfect examination is the fault of the individual. It is seen in all spheres of medical activity where slipshod practitioners are engaged in work. I deny that it is relatively more frequent in Panel Practice than in other branches.

That there is a "general lack of support to the Panel System by the medical profession as a whole" is an expression of opinion on the part of the writer in the "English Review," and is not a statement of fact. At present National Insurance Practice affects only the Practitioners in General Medicine and not those engaged in special work of any kind, nor those engaged in consultant work; therefore to obtain the number concerned with it you must remove all these latter from the total number of persons on the register as well as all who have retired and that large floating number of young men and women who have not yet settled down into their life's work. When the men and women actually engaged in General Practice alone are considered, the number who have not gone on the panel is relatively very small, and is to a certain extent formed by Political Die-Hards who are irreconcilable to the Insurance Act of 1911. That the specialist and consultant branches have not taken any interest in the working of the Insurance Acts is not to be wondered. It would have been an impertinance for them to interfere with other men's business in which they had no concern until they were asked. That it will some time concern them I do not doubt, for I foresee the extension of Medical Benefit to their work, and men in those branches will then have to consider the relation of their position to the Panel System.

I have now for nearly two years worked with and for Panel Practitioners and find them like men in other branches of our profession to consist in the main of honourable men conscientiously trying to do what they believe to be their duty. They include among their number, as do other professions and other branches of our profession, a small number of black sheep. The Panel Service does, however, differ from other parts of our profession by the fact that the harm which its black sheep do is limited in extent at the same time as it is magnified in the public view by the search-light of enquiry which is instituted into every act, clinical or ethical, of the Panel Practitioner. I have little doubt that there are certain so-called consultant practices which would not stand the strain of such enquiry for a twelvemonth. Again the Panel and Local Medical Committees can and do exert a restraining influence upon those who do their work badly. This influence is steadily increasing and is evidence of a healthy discipline from within that is all to the good of the Service. If ever there be an enquiry into the whole working of the National Insurance Acts by a Royal Commission or otherwise it will not be those members of the Medical Profession working the Panel System who will as a body fear to face the investigation.

The majority of your fellow students will probably become Panel Practitioners. In my opinion a year's work at Panel Practice in an industrial or agricultural area would be an invaluable training to every other one. It is to be regretted that in the struggle to acquire knowledge during the student period men are sent out into the world totally ignorant of the Insurance Acts. In an informal conversation with the Dean about a year ago I suggested to him that one or two lectures on the Insurance Acts should be included in the curriculum before a man goes in for his Final; he gave it as his opinion that he did not think it was the business of the school to give such instruction, and there was already so much that we could not officially include any further subjects. Unofficially, however, I have made preliminary ad-

vances with a view to getting one or two lectures at some time on this subject. Your own ignorance which is so profound that you believe a child comes under the National Insurance System makes me feel that the time has come when these would be helpful. I am therefore writing to the Dean asking him in his courtesy for permission to use one of the Theatres in the Medical School, and hope to get a practitioner who really does know something about the Panel System to come and give the lectures.—I am, dear Mr. Editor, Yours faithfully,

T. B. LAYTON,

Member of the Local Medical and Panel Committees for the County of London.
(Ex-Chairman of the Finance and General Purposes Sub-Committees.)

10, Welbeck Street, W.1.
1st September, 1923.

Guy's Hospital Musical Society.

DEAR SIR,— We feel confident that you will be interested to hear that the Guy's Hospital Musical Society is to renew its activities this season.

A start, somewhat experimental in nature, was made in 1919. The following year a most successful concert was given and we hoped that the future of the Society was assured.

This, however, proved not to be the case and the Society, once more, sank into oblivion.

The Executive Committee has never ceased to function and it has now come to the conclusion that the time is ripe for a further effort to establish the Society on its successful pre-war footing.

It has been decided to abandon the old custom of an Annual Concert and to substitute in its place the performance of an Opera. If this venture meets with the support we feel it deserves, more than one performance will be given, which will be advertised outside the Hospital.

Any profits which may accrue from these performances will be allotted to the Nurses' Cottage at Honor Oak Park for the reduction of its debt.

Owing largely to the fact that with the Musical Society is incorporated the Nurses' Choral Society, affiliation to the Clubs' Union is not possible. The Society, therefore, depends financially upon voluntary subscriptions and consequently upon the generosity of Members of the Staff, and of the Society and any others interested in the welfare of Hospital Music.

May we, therefore, invite all those who are interested in music to become subscribers to a Society which, we hope, may once more become as successful as any in the Hospital? Subscriptions should be sent to either of the Secretaries at the address, below, or to the Treasurer, W. M. Mollison, Esq., M.Ch., F.R.C.S., at 23, Devonshire Place, W.1. —We are, Yours faithfully,

CHAS. E. GALLAGHER,
MAURICE MITMAN,
Hon. Secs.

Guy's Hospital, S.E.1.
September, 1923.

The Biennial Dinner.

DEAR SIR,—Every old Guy's man should by now have received a notice of the forthcoming dinner, fixed for Wednesday, October 17, at the Connaught Rooms, but it is possible that some few notices might have gone astray, as it is not always easy to be quite sure of every address. If, therefore, any reader of this has not yet received a formal notice, I shall be glad if he will send me his name and address on a postcard. I should also be very grateful if anyone will let me know of any Colonial Guy's men who he thinks will be temporarily in England at that time.

Notices have not been sent to present students, but all are invited to come to the dinner, and notices are posted in the Colonnade, Students' Club, Dental School and Library; forms of application may be obtained from the Librarian.

May I also remind those who have not yet notified me of their intention to be present that I hope to publish a preliminary list of acceptances in the next issue of the GAZETTE, and I should like that list to be as large as possible.—Yours sincerely,

ARTHUR W. ORMOND.

9, Devonshire Place,
Upper Wimpole Street, W.1.
4th September, 1923.

Reports on Two Cases,

DEAR SIR,—I enclose short notes of two cases from general practice, which seem to me to be of interest.

The case of hæmaturia impressed me, because I gained the notion, as a Medical Ward Clerk, that practically all cases of acute nephritis gradually merged into the chronic type, and rarely cleared up completely.

One might be excused such an impression from the type of case we used to see, but I know now, not only from this case, but from others that my impression was not correct.—Yours faithfully,

GEOFFREY DUNDERDALE.

280, Loop Street,
Pietermaritzberg.
South Africa.
21st August, 1923.

1. *A Case of Acute Nephritis treated with Anti-Streptococcic Serum.*

Patient, W. Z., aged 10 years, one of five children, has always been subject to attacks of tonsillitis and quinsy. About March 1st, 1922, he began one of these attacks, which appeared to his mother to be nothing out of the ordinary, and she did not call me in till March 15th, when the boy complained of nausea.

When I saw him the throat appeared to be well on the way to recovery, and he seemed well himself, only complaining of lack of appetite, and some nausea. A bismuth mixture relieved the nausea, and the throat had ceased to trouble him at all, when on March 22nd he developed œdema of the face and feet, and hæmaturia.

I promptly put him on milk diet, and a citrate of potash mixture, with saline aperients as requisite, and turned my attention to the urine. The specimen contained an enormous number of red cells, but there were no pus cells, nor any sign of Bilharzia ova. I then sent a specimen to the Durban Clinical Research Laboratory, who reported as follows:—"The centrifugalised deposit contained much blood and moderate numbers of small spheroidal cells, resembling those of the renal tubules. Neither casts, crystals, parasitic ova nor cell masses were observed."

On subsequent microscopical examination the same conditions prevailed, and I found hyaline casts in small numbers.

The boy made practically no progress, and at the end of four weeks there was so little difference in his condition, that one began to be anxious.

There were no signs suggestive of calculus, and bacteriological examination showed no evidence of tubercle.

It occurred to me, however, that the whole thing might be the result of septic absorption from the tonsils, probably of streptococcal origin, and I therefore started to give the boy anti-streptococcic serum.

For convenience of administration, i.e., so that the mother could give it in my absence, I gave it per rectum, beginning with 10 c.c.

The day after the first dose the urine was clearer to the naked eye, and from then onwards I continued to give serum every second or third day, giving 10 to 20 c.c. at a time injected into the rectum with a little normal saline. In all 180 c.c. of serum were given, and the urine cleared steadily and rapidly, the patient being discharged on June 17th, after having been completely free from albuminuria, or hæmaturia for three weeks.

I examined his urine again on April 19th of this year, and found it perfectly normal. The only further treatment I am anxious to carry out is the removal of the tonsils, which, so far, the parents have not agreed to.

After I commenced the serum treatment he had no other medicine, except tonics, chiefly iron and arsenic.

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2. *A Case of Resuscitation from apparent death after Anæsthesia.*

On July 16th, 1922, I anæsthetised a child of four for the removal of tonsils and adenoids. She was a pale little girl, thin, and very nervous, and screamed very much at the beginning of the induction, suddenly becoming quiet, and going under rapidly. Once anæsthetised she was perfectly satisfactory until we moved her, so as to lower the head for the tonsillectomy. She then became blanched suddenly, and respiration and circulation ceased.

Artificial respiration was commenced at once, and pituitory extract injected, but no pulse could be detected at all, and I therefore injected three minims of adrenalin chloride solution, 1 in 1,000, direct into the left ventricle. The heart recommenced to beat within about ten seconds of the injection, and gradually resumed its normal rhythm. Artificial respiration was continued until the child breathed naturally, and she was wrapped in hot blankets, and kept on the table until the normal respiration and circulation appeared to be fully established, when she was returned to bed. The operation was not performed.

The total period of suspended animation was not more than two minutes, I should judge.

I learnt on enquiry that there were no further symptoms, and the child was herself the next day.

Reviews.

Asthma. By Frank Coke. (Wright, Bristol.) Price 15s.

Mr. Frank Coke in his book on Asthma defines the disease as a "form of dyspnœa in which the obstruction to respiration lies in and about the bronchi and the bronchioles." Though this is accurate, so far as it goes, it is not sufficiently comprehensive. We should prefer to define asthma as a condition caused by abnormal irritability of the part of the respiratory centre controlling the activity of the bronchi, which results in spasm of the bronchial muscles, hypersecretion of the bronchial glands, and congestion of the bronchial mucous membrane, when the centre it stimulated chemically or reflexly, or centrally as a result of emotions or ideas. A definition of this kind prevents those narrow conceptions of the disease, which have in the past led to the over-enthusiastic recommendation of new methods of treatment with subsequent reaction and disappointment when the results

were reviewed after a period of years. Thus the introduction of intra-nasal treatment was hailed as a means of cure for nearly every asthmatic. But the numerous other factors present in asthma, many of which are much more important, were ignored, and the treatment has now assumed its proper place as an accessory, and often very useful, but never curative method. Similar excessive claims have followed the introduction of treatment based on the popularisation of the cutaneous reactions as tests of hypersensitiveness to certain proteins. Walker of Boston, and more recently Mr. Coke, found that 52 per cent. of asthmatics gave positive reactions. By avoiding exposures to the proteins to which an asthmatic is hypersensitive and by special methods of desensitization, when this is impossible, excellent results have been obtained. But apart from the fact that this only accounts for 52 per cent of Walker's and Coke's cases, the reflex causes are neglected, and the one essential factor—the irritable bronchial centre—remains untreated. Walker's monograph on asthma in a recent encyclopædia of medicine is most misleading, as it gives the impression that asthma and hypersensitiveness to certain proteins are practically synonymous, and that treatment founded upon the results of the cutaneous reactions is all that is required to cure asthma. Similar disappointment must be felt on reading Mr. Frank Coke's book on Asthma.

It is very difficult to understand how Mr. Coke has obtained positive cutaneous reactions in the same large percentage (52) of asthmatics as Walker. The reviewer brought back from America a first set of proteins for testing in August, 1919, so that the tests have probably been carried out at Guy's for a longer period than anywhere out of America. But the positive results obtained in asthmatics with these proteins, which are prepared under Walker's direction and are those generally used by Coke, have been so rare, certainly not more than 10 per cent., that the protein solutions made by two English firms have been tried instead, but with only very slightly better results. Our Guy's experience agrees with that of nearly every one working on the subject in England and France, so that the discrepancy between our results and those of Walker and Coke urgently requires explanation. It is perhaps due to the fact that Coke rarely makes a control test, for it is not uncommon to find one or more apparently positive reactions, which prove to be of no importance on comparing them with the equally great reaction produced by the solvent above.

With regard to treatment, anybody who has had much experience of asthma both before the war and since will agree that the introduction of the cutaneous reactions and the methods of treatment dependent upon them has not led to any appreciable improvement in the prognosis of asthma. It is a gross exaggeration to say that "the whole outlook in asthma has been completely altered by the recent methods of investigations." Freedom from symptoms for a few weeks or even for 3 or 4 years, which are apparently the longest periods in Coke's series of cases, is not a cure; the irritable bronchial centre is still present, even if certain stimuli which formerly attacked are no longer allowed to operate. Avoidance of animals and food to which the patient is sensitive has been a familiar method of treatment since Hyde Salter's book on asthma was published in 1868, and in our experience an accurately elicited history is of more value than the cutaneous tests in discovering specific hypersensitiveness.

With these reservations Mr. Coke's book can be thoroughly recommended to those wishing to obtain an accurate picture of the various forms of asthma and to familiarise themselves with the recent work on the pathogenesis of the disease and the technique of treatment by Freemaan and Walker's specific protein desensitisation, Auld's peptone treatment, and specific and non-specific vaccination.

The recognition of the relation between asthma and anaphylaxis has thrown much light on many phenomena occurring in asthmatics which were formerly obscure, and Mr. Coke's very clear discussion of this question will be interesting to any readers not familiar with the extensive American and French literature on the subject.

Pass List.

University of London.
1st Examination (M.B., B.S.) for Medical Degrees.

July, 1923.

S. I. Abrahams.	R. A. Leader.
V. M. Allom.	W. S. McConnell.
C. Arkles.	J. E. Morton.
I. Bakhsh.	G. Van R. Mostert.
J. H. Barendt.	N. E. Pitt.
G. C. Campbell.	O. Plowright.
E. T. Conybeare.	J. R. Rickett.
S. J. M. Nevasquez.	T. G. Scott.
P. M. Deville.	E. C. Till.
D. E. Dunnill.	R. S. Twigg.
R. E. Fossey.	J. A. Vernon.
R. L. Harward.	C. G. Walmsley.

Society of Apothecaries of London.

August, 1923.

Surgery.

E. N. C. Annis. H. Maclachlan.
H. T. Chiswell.

Midwifery.

E. N. C. Annis. R. S. Chambers.

Appointment.

J. F. H. Stallman, M.B., B.S., F.R.C.S., Surgeon to the Finsbury Dispensary, Clinical Assistant Out-Patients, Hospital for Sick Children, Great Ormond St., Medical Officer, Central Foundation Boys' School, Acting Medical Officer, H.M. Prison, Brixton.

Death.

DOUTHWAITE.—On 7th September, 1923, at 25, Victoria Square, Clifton, Hugh Trevor Douthwaite, son of Dr. and Mrs. A. H. Douthwaite.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Salvete.

IT is our happy custom to produce, once every year, a special "Students" number of the GAZETTE.

This is it.

Serving a double purpose, it combines the warmest of welcomes to all new Guy's men with an abbreviated guide to the Hospital and Medical School. By such a production it is always hoped to make our neophytes feel speedily at home, while preventing them from calling on the nurses in mistake for the adjacent laboratories.

As usual at this time of the year we see many new faces wandering in the Park, each one repressing with difficulty the worried expression of the stranger, uncertain of his destination. Some of you we have even seen in the College refectory, dining by request at the centre tables, and have tried to decide which of you looked most likely to gain the Entrance Scholarships. We have also tried to decide which of you looked most likely to buy our well-worn chemistry and physics books, but this was not why the centre tables were set apart for you.

In the name of all connected with Guy's, we give you welcome. From to-day you become a very real part of the Hospital, its good name is in your keeping, its ideals must be yours. If, as must be the case from the very choice of your profession, your ambitions are entirely unselfish, you will find your Hospital career the most delightful period of your life. The fact that you are at last really starting to study for the relief of human suffering will add an incentive to your work that you have never yet experienced, and will fill you with a sense of the responsibility that your chosen career entails. The good people of the Borough will assist in keeping this sense alive, by beginning straight away to address you as "Doctor," and from the moment that you are presented with your first set of test-tubes and an "Aye-aye, Sir," from Nash, you will begin to earn that distinction. It may be at times during your pre-clinical period that your studies will seem to have but little relation to the alleviation of pain, but it is on the possession of a sound knowledge of these very subjects that clinical medicine and surgery depend. Even the curious fact that "acetamide smells like mice" finds a place in the realm of human medicine.

In certain respects you are more fortunate than those who have started before you. True, each year adds to the discoveries made in every branch of medicine and your syllabus

grows longer and longer, but the time required to be spent in the wards to qualify you to sit for your "final" has been lengthened and you are the first students to use the new block of the Medical School. The standard of work at the Hospital now is extremely high, as is testified by recent examination pass-lists, and we look to you to see that this standard is maintained. Nor is it sufficient that you pass your examinations. To impress your examiners favourably is but an incident and that a small one in your immediate future. Your real work lies among the sick; their welfare will be entrusted to you and should any of your efforts on their behalf fall short of your best, you will be betraying that trust. Sometimes the work will become irksome, rarely it will be met with ingratitude, but never must you forget that you are dealing with human lives or avoid trouble by a makeshift, when extra work or thought could benefit your patient. The art of medicine is not a business, it stands at the bottom of the list of money-making professions. In contrast to the great strides that curative medicine has made, preventive medicine has progressed but slowly. Children are daily born into the world, ear-marked for disease. The conditions under which they live prevent them from spending their early years in healthy surroundings. To you will fall the task of educating the public to a sense of their responsibilities towards the future generation. Now is the time, at the commencement of your studies to begin to fit yourself for this task. Attention to detail, unselfishness and infinite patience will be as necessary to you, if you are to succeed, as knowledge and technique. Here at Guy's you will have unrivalled opportunities of studying the people, their wants and the difficulties under which they live, first in the wards, later in the Out-Patient Department, and finally in their homes. They will come to you with their mental troubles as well as their physical ailments and if you are fitted for your profession you will deal with the former as sympathetically as you do with the latter.

We have just remembered that this is an address of welcome and not a sermon, to any of which we have never listened but with the greatest impatience. But an address of welcome is so difficult to write. When we have said "Your are welcome," what more is there to say? We will say nothing. In a few days, when the strangeness of new surroundings has worn off, you will discover that you have really become a Guy's man. In whatever sport you spend your spare time, you will find a club here anxious to include you among its members. Do not wait to be asked to join. Study the athletic notice-board in the Colonnade and make yourself known to the Club's honorary secretary. Join in the games, and play hard, for the Hospital is as jealous of its athletic prowess as of its scholarship. A large number of the clubs and societies belonging to the Clubs' Union have notices in this GAZETTE, notices of the others are all to be found in the Year Book, obtainable at the Medical School Office. Find your Club and join straight away and whether you become one of the famous first fifteen pack or a lowly member of the back row of the chorus in the Musical Society's Opera, may you thrive and be happy.

Remarks to Students Entering the Wards of Guy's Hospital.

BY DR. E. P. POULTON.

In the first place I should like to offer you my hearty congratulations, since, when you enter the wards, you are beginning your life work in earnest, after having completed your

preliminary training in the pure sciences. Secondly, I want to sound a note of warning to you, not to throw aside what you have just learnt as of little importance. You may be tempted to do this in the excitement of new surroundings.

The fundamental importance of human anatomy to clincial studies is of course obvious to everyone, and questions in pure anatomy have always been set in the final examinations in Medicine and Surgery. Twenty and perhaps even ten years ago, the application of physics, chemistry and physiology to the practice of medicine and surgery was not so very obvious. That is so no longer, and in every future year great advances in medicine and surgery will be due to the direct application of these fundamental sciences. As an illustration I may cite the visits paid to us this summer by three distinguished visitors from the American continent. The Mayo Brothers, practical surgeons par excellence, have done more than anyone by their example and by their generosity to advance our knowledge of surgery along these lines, and you ought all to read their addresses to us, which were published in the GAZETTES of August 18th and September 1st, 1923. Mark well Dr. William J. Mayo's final remark:—"We in the States are in a frame of mind in which we believe that almost anything can come by a further study of bio-physics."

Our third visitor, Professor Banting, who lectured to us on insulin on July 11th, made his great discovery in the physiological laboratory of Toronto University.

No, the days of water-tight compartments are over at last and your examiners have at length recognised this by requiring you to show that you know something of the applications of the fundamental sciences to your clinical work in the final examination.

You have already been brought into touch with disease in its relation to physiology by the excellent demonstrations on selected patients by Professor Pembrey and his colleagues, and no doubt those of you who come from Oxford and Cambridge have had similar experiences. In turn, you should in your clinical work try to bring in your knowledge of physiology to help you to explain the various pathological problems presented to you in the wards.

Now for some practical suggestions. If you do your clerking and dressing conscientiously you will find that you are kept very busy, especially as there will be post-mortems and clinical lectures that you will wish to attend. Added to this, at the present time you will have lectures in pathology, bacteriology and practical work in these subjects, all of which are of the highest importance. It is much to be hoped that in the near future, with the lengthening of the clinical period of study, these latter subjects will have been taken before you do your dressing and clerking.

However, at the present time you will be extremely busy and it is always a problem how much reading should be done and what kind it should be. You will not be able to do much, but it is very important to read a little and there is no doubt that the best plan is to read about your own cases in the wards. Do not necessarily be content with the description of a disease given in a text-book, especially if it is an uncommon one. See what the larger text-books, that you will find in the Wills Library, say about the disease. Ask your physicians, surgeons, or registrar whether there has been any recent article of importance on the subject and if possible read it. The items of knowledge you will gain though rather disjointed at first, will dove-tail together later on, as you see more cases. As you read, try and think of more investigations you might carry out on your case. You should also read a text-book of pathology, such as MacCallum, choosing out either those parts that have a bearing on your cases, or about which you have been hearing in your lectures and classes. Don't try and read a text-book right through.

I have just been extolling the virtues of reading with discrimination, but when I say reading, I don't really mean reading alone.

I mean writing as well. Early in my student days I was fortunate in having a tutor who impressed this truth upon me—that you forget what you read, but you don't forget so easily when you write it down. My advice to you is to get a loose leaf note book of fairly large size and write down neatly in tabular form, everything you will have to remember about a disease. Bring in your own cases as illustrations of particular symptoms, etc., especially if they are unusual. Leave plenty of space in your notes for subsequent additions and only write on one side of the page, so that you will have the other side free for any remarks you may hear later on the subject.

By the time you have finished your clerking and dressing you will be in a fair way to have constructed your own text-book of medicine and surgery. Just imagine the relief when you come to revise for examination. You will, practically speaking, only have to read your own notes through.

But there is one final advantage of reading and writing, over reading alone, and that is, that you will not find yourself falling asleep in the course of your work, even if you are making your notes in a comfortable chair before a warm fire. You will almost certainly fall asleep if you try and read under these conditions. Experientia docet.

As surgical and medical ward clerks your most important duty will be the examination of your patients and the writing of careful reports. The best times for this will be in the early part of the morning, beginning at 10 a.m., so long as pathological classes are not interfered with, and in the afternoon after tea. As medical ward clerks you will have one morning a week in the Out-Patients Department. You should arrive early, and after choosing one of the new cases, get the history and make a careful examination, exactly as you do in the medical wards. Write your results in an abbreviated form on the letter and try and make your own diagnosis before the physician examines the case. In your ward work you should make full use of the clinical laboratory, doing all the simple examinations yourselves. Do not omit these, even though you may happen to know that the specimen has been sent to another place for an authoritative opinion.

You should attend as many post-mortems as you possibly can, and during the period that you are post-mortem clerk you should arrive early to remove the viscera from the body and later on cut them up on the table under the supervision of the demonstrator. But don't choose, as the day for this job, the very day that you are responsible for the notes of the case—I have known this to happen—because your friend who acts as your deputy will probably not be able to read your writing, and you will not be popular in consequence. Any spare half hour in the day can be most profitably spent in the museum looking at the specimens on the shelves, and here again, you should examine those that have a bearing on your cases. But you will have other duties to your hospital, your friends and yourself, quite apart from your work. There are the various societies that will require your attendance for their success, and first and foremost comes the Pupils' Physical Society. Then there are the various clubs. It is an astonishing fact that so many men, who have passed their examinations in physiology and presumably know the elements, yet fail to practice them in their own lives, by not troubling to take regular muscular exercise in the open air.

Finally, you will be coming into regular contact with two new classes of people for the first time, your patients and those invaluable helpers of the medical profession, the nursing staff. Never forget that the patients are not merely "cases," nor the nurses machines. Cultivate the qualities of sympathy and consideration, and remember that finest of all mottos, that belongs to our Hospital and is being carried into practice by Guy's men throughout the world—Dare quam accipere.

Pathology.

By Professor ADRIAN STOKES.

Many men, when they enter on their clinical period, wonder what is meant by Pathology, and are doubtful as to its importance as a subject. Its relations to Physiology, Medicine and Surgery are not obvious and men have often asked whether it was necessary to attend classes in Pathology.

If we believe that Physiology and Anatomy are the foundations of our knowledge of the normal human being, then Pathology is the structure we build later, as a storehouse for the knowledge which ultimately enables us to deal with disease. To understand the departures from the normal, the causes of these departures, the results in the tissues and fluids, and the methods of repair and readjustment, must clearly be the first essentials in rational treatment. Pathology is then a subject which is, perhaps above all others, essential to the student and the practitioner.

The logical successor of Anatomy, Physiology and Biology is Pathology; in the former we deal with normal stimuli and the normal response, in the latter it is with abnormal or harmful stimuli. Physiology is the study of normal life, Pathology is the study of abnormal conditions superimposed on the normal. In no subject is it more important to realise that watertight compartments of knowledge are inadmissible, and that what we learn in our earlier years in an essential preliminary for our study of disease.

The range of the subject is immense when it is realised that it covers all that is known of the causes of disease, where they occur, how they are transmitted, where and when the normal sequence is interrupted, and what is the final result of a harmful stimulus.

As new knowledge has accumulated and the application of other sciences has progressed, special branches of Pathology have become recognised. We have Morbid Anatomy, which deals with the gross pathology of organs and tissues. Perhaps this branch is the most valuable from the point of view of the student and practitioner. Bacteriology has become such a vast subject that the time has arrived when it is becoming sub-divided into smaller branches. Morbid Histology is a subject in itself. Chemical Pathology has possibly a wider outlook than any of the older branches. Whereas Serology probably holds pride of place so far as actual clinical achievements are concerned.

The reactions of different tissues to different injuries, the methods of combating injury, the repair and regeneration of tissues must all be understood if we are to deal successfully with disease.

The instruction in Pathology is spread through the Clinical Period, it begins with a three months' course, in the rudiments of Pathology and Bacteriology, it is continued with daily demonstrations in the Post-Mortem room and is also supplemented by Museum demonstrations in applied Pathology. The actual time devoted to systematic lectures and practical classes is far too brief to obtain the requisite knowledge fully to benefit by the subsequent opportunities of learning the subject. It cannot be too often repeated that a knowledge of the morbid processes is the first essential to the correct diagnosis of a condition, and that diagnosis is the first essential of treatment; it follows, the above premises being granted, that Pathology is the surest route to success in dealing with disease.

Education and Ethics.*

By MONTAGUE F. HOPSON, L.D.S.Eng.

There are two just reasons for the choice of any way in life; the first is inbred taste in the chooser; the second some high utility in the industry selected. Of your own free will you have chosen a calling, with the high utility of which I will deal later. At the

*By kind permission of the *British Dental Journal*.

moment, I would speak of the education you must receive before embarking upon the practice of the profession of your choice.

First, what is this profession of Dental Surgery? It is a special branch of the great Art of Healing that is known as Medicine. Owing to peculiarities inherent in the tissues with which you have to deal, talents are demanded that are not required by the practitioners of other specialities—a knowledge of materials, a skill and dexterity in their employment; indeed, a master-craftsmanship, revealing art. Yet, essential to full success as these qualities are, their realisation depends upon certain fundamentals, which are common to medicine as a whole. Hence the importance of a wide general knowledge of your subject.

Unless you know what organs are like in health, their relations to one another, what their functions are, and how these functions are normally carried out, you cannot possibly know how to treat them when they become injured by accident or disease. Thus, after acquiring a knowledge of the principles of Chemistry and Physics, the early stages of your curriculum are devoted to the study of Anatomy and Physiology, that is to say, to the Normal.

Thanks to the labours of great observers in the past, the gross, or naked-eye anatomy of the body is almost an exact science. Physiology, on the other hand, despite all the advances that have been made in recent times, is largely an experimental science. Huxley most truly said: "There is no side of the human mind which Physiological study leaves uncultivated. Connected by immeasurable ties with abstract science, Physiology is yet in the most intimate relation with humanity, and by teaching us that law and order, and a definite scheme of development, regulate even the strangest and wildest manifestations of individual life, she prepares the student to look for a goal amidst the erratic wanderings of mankind, and to believe that history offers something more than an entertaining chaos—a journal of a toilsome tragi-comic march nowhither." You remember Hamlet's declaration:—

> "What a piece of work is man! How noble in reason! How infinite in faculty! In form and moving how exquisite and admirable! . . . The paragon of animals."

When you have some knowledge of the structure and the workings and the functions of this wonderful piece of living mechanism—and here, in passing, I would commend to you that delightful book by Sir Arthur Keith, "The Engines of the Human Body," none the less valuable because it comprises the substance of some juvenile lectures given at the Royal Institution—you will proceed to investigate more closely still those organs and correlated parts, the diseases of which you propose to make your special study. And having done so, you cannot fail to be struck by the fact that Teeth are not separate entities, but are, in the most exact sense, a living part of a living whole. I would have you from the outset get right hold of that salient fact.

There is nothing which has done more to hinder the advancement of dental surgery as a science than the idea that teeth are different from other body tissues—things apart to be dealt with as a mason may deal with a piece of inanimate rock, that can be carved, adorned or mutilated without showing reactions similar to those displayed by other living tissues and organs of the body. The really wonderful thing about teeth is their toleration of the abuses to which they are subjected.

Next, you will learn something about disease—that is to say, general disease; how it is caused, what effect it has upon the body as a whole. For the effects of disease are never confined solely to the part in which it originates; indeed, it often happens that the first recognised symptoms of disease appear in some part remote from that primarily affected. You will marvel at the wonderful fight the various tissues and minute cells of the body put up to prevent and to overcome disease, but you will

not understand it unless you have learned all about the workings of the "Normal." Then, and not until then, will you be in a position to deal with dental disease, and if you have real knowledge you will observe that it differs from disease elsewhere only in that its local manifestations are modified by the nature and environment of the tissues concerned.

But here it is that a special knowledge and technique will be demanded, because you will be called upon to replace by artificial media those tissues which have been lost, for, unfortunately, the hard tissues of the tooth crown are not restored naturally as are some of the soft tissues of the body. Further, you may have to replace whole organs by artificial substitutes. Hence, all the time you have been learning about the "normal" your fingers have been trained in the practice of the delicate art of Dental Prosthetics.

Have I frightened you new students by this recital of the preliminary requirements for entry into the profession of your choice? Have you been saying to yourselves: "How can it be done in four years?" Take courage again. No man or woman has ever learned it all in four years—nay, in a whole lifetime, nor ever will. The other day I had a letter from a practitioner whom I had known when he was a student. He wrote to me respecting a youth he was thinking of engaging as an assistant. He asked whether this newly qualified man was an "expert gold worker, a skilled orthodontist, and could be trusted to deal with difficult prosthetic cases." I replied something like this: "Dear A.—I believe that B. has made the best possible use of his opportunities during his four years studentship. Knowing you both intimately, I am in a position to express the opinion that B. is even better qualified to practise his profession than you were three weeks after you received your diploma. Take him and give him a trial and God be with you both."

Whilst you are studying here, you will have opportunities of laying down a sure foundation upon which to build knowledge, such as may never occur again. Disabuse your minds of the idea that the sole object, the end-all of your work here is the passing of a Final Examination. Examinations are—I was about to say "rotten"—in the present state of society and civilization they are necessary evils. But they may be rotten and prove a real stumbling-block to the acquisition of knowledge if a man regards them in the way to which I have just referred, and works to pass rather than to know. The Charing Cross Road in London is largely given over to secondhand bookshops, which I am afraid I visit more frequently than is good for my pocket. A short time ago I took down a book, a familiar text-book, from one of the shelves, and found inside the name of a man known to me as having quite recently passed his final examination. That book belonged to a man who worked to pass and not to know. He did pass, but he did not know, and probably he never will know. Your work here is but a preliminary to a course which should last through life. Do not take all you read in your text-books nor all you gather from your teachers for granted. The true function of a teacher is to help you to learn, and it is ever better to learn than to be taught. In so far as it is possible, test things for yourself, and prove them to be true. Keep your eyes open and observe, make comparisons, then carefully think over your observations and maybe you will discover a new truth or "scotch" an old error.

I would impress upon you the importance, in these early days of study, of acquiring the advantageous habits of order and of method. These habits will serve you well, save you much, take you far, and assist you in acquiring that even temper, that "æquanimitas" which will enable you to face difficulties or defeats with courage, and success with modest elation. Remember that patience and diligence, combined with method, are worth twice as much as mere cleverness.

When you come to do clinical work in the hospital, your responsibilities will increase, for you will be brought into personal contact with

hospital patients. They are worthy of the same care, courtesy and consideration as you would extend to a patient in private practice. Do not sacrifice thoroughness and gentleness to quickness. That which is well and properly done is done quickly enough.

As a public institution of this great city, your hospital is open to public criticism; see to it that no action of yours tarnishes the reputation it has gained by the labours and devotion of those who have preceded you. And when you have come to the end of your time here, if you have studied wisely and well, you will be conscious of the fact that you have to be learners still, you will realise the truth of these lines of Cowper:—

"Knowledge is proud that he has learned so much,
Wisdom is humble that he knows no more."

May I, in conclusion, address a few words to those who have recently finished or are about to finish their period of study here?

The majority of you will necessarily be engaged in a combat with manifest disease, but I trust that some of you have been innoculated with a desire and a zeal for Research. To those I would say: You have a great field before you; the things we know about dental disease are but a tithe of those yet to be discovered. At the beginning, I spoke of dental surgery as being a special branch of the great Art of Healing; that is really an old term, for to-day Medicine includes not only the Art of Healing, but that which is more important, the Science of Prevention. It is to research work in the laboratory and elsewhere that the general dental practitioner must look for advancement in the practice of his profession—preventive, curative and operative—and not to commercial supply depots which have something to sell. I rejoice, therefore, that the Medical Research Council of the Ministry of Health have already appointed a committee to supervise research in dental pathology and to afford financial assistance to those engaged in such work. I doubt not that some of the old students of this school will seize the opportunities and facilities which are at hand in a progressive University like your own, and take part in work of such urgent importance waiting to be done and capable of producing such beneficial and far-reaching results to mankind.

But, as I have said, most of you will engage in the routine practice of your profession. Some will enter the public services, such as the Navy and the Army. Others will, no doubt, seek appointments under the Board of Education. In such capacities it is incumbent upon you to maintain the dignity and honour of your calling. This public dental work is comparatively new, and it rests with those who are engaged therein to prove its value and importance to the State.

Those of you who enter private practice on your own account may expect to have a considerable amount of free time in your early years. That waiting period is apt to become some men's undoing. Habits of slackness are easily acquired and difficult to shake off. Beware of such habits and seek to occupy those leisure hours in a profitable manner.

Later, when you get busy, method and order will be your stand-by. Never regard yourself as too busy to make careful notes and to keep accurate charts of all you do. Not only will such notes be valuable in the strictly business sense, but when you came to connote and classify them, it is wonderful what a mass of useful and valuable information will accrue. And here it is that you co-operate with the research worker; not only do you put his laboratory findings through the fiery tests of practical clinical experience, but you are often in a position to afford him material for new investigations.

Again, do not lead an isolated professional existence. It is extraordinary how rapidly one rusts and gets out of date if this is done. Mix with your fellow-practitioners, join some dental society, and if you should be so placed as to find it difficult to attend its meetings, do not neglect to read its publica-

tions and other medical and dental journals, and thus keep *au courant* with what is going on.

I would that every few years it were possible for us all to get a few months away from our practices, and devote them to post-graduate study. True, there are at the moment but few facilities in this country for taking over organised courses. Here in Birmingham you have made a praiseworthy effort in this direction. I am, however, looking to the newly established Dental Board of the United Kingdom to devote some of its surplus funds to the establishment and endowment of centres of post-graduate education throughout the country, for, next to the endowment of research, nothing is more urgently needed.

Finally, may I presume to say a word about what is called professional etiquette and professional ethics? Professional ethics are really nothing more than gentlemanly conduct. Stevenson said: "To be a gentleman is to be one all the world over, and in every relation and grade of society. It is a high calling to which a man must first be born, and then devote himself for life." It applies, in particular, to our relations with our patients, and with our fellow-practitioners.

Your first and paramount duty is to your patient.

Your second to the profession to which you belong.

And, if you play the game in those two spheres, you will not be wanting in your duty to yourself.

You will come to regard a neighbouring practitioner, not as a mere rival and competitor off whom you may score, but as a colleague. You will be chary of criticising another man's work to a patient, because you do not know the circumstances under which that particular piece of work was done. You will discount the tittle-tattle which you cannot stop a patient imparting to you, as to what Mr. A. said or did, knowing full well that those who talk thus are usually wanderers, and that in a few months time will be saying the same sort of thing about you to someone else. When you receive an emergency visit from a patient, who happens to be staying in your district, do whatever may be necessary to tide him over until he has the opportunity of returning to his regular dental surgeon, and do not carry out a lot of non-urgent operative work which really belongs to the practitioner whose patient he is. Write to the patient's own attendant and tell him what you have done.

If a patient suggests "another opinion," acquiesce at once. Communicate with the consultant agreed upon, stating fully the facts of the case as you know them. And if a patient should come to you for a "second opinion" without the knowledge of his regular attendant, you will not be failing in right conduct if you communicate the fact to the practitioner concerned.

You will not advertise yourselves, because all you have to offer the public is your own personal skill and ability, and no gentleman boasts of that. Indeed, the whole matter was summed up in words uttered by Epictetus, old and a cripple, two thousand years ago: "If you wish to be well spoken of, learn to speak well of others; and when you have learned thus to speak of them, act well, so that you may enjoy the fruits of being well spoken of."

That is all I have to say.

Medical Education in the Pre-Clinical Period.

By Dr. J. M. H. CAMPBELL.

It is impossible to do better than to quote some of the words of Sir William Gull—one of the greatest of Guy's sons—from his address at the opening of a winter session nearly seventy years ago.

"The present is an occasion for a general survey, especially necessary to those amongst us who to-day begin a new career and now fairly launch upon the ocean of life; for how important is it that they should, in nautical phrase "take a right departure' richly freighted as they are, and with bright hopes and anticipations of a prosperous voyage.

"The study of Medicine conjoins some of the strongest and highest motives to its earnest cultivation—its objects are of universal interest to mankind and appeal to the common principles of our nature, so that we may affirm with the proverb 'primus homo primus fuerat medicus';—it is so generally esteemed as to obtain respect from the most barbarous;—its scope is so wide as to give exercise to all the faculties of the mind, and it borrows from the stores of almost every form of human knowledge;—its operations are so benevolent

that our Divine Master himself assumed its offices as a type of his spiritual ministrations."

No doubt you will all agree with these high ideals as far as they touch your clinical work, or you would hardly start the arduous life of a physician; but many of you will doubt if there is the same importance, and if it is worth giving the same hard service to the study of your pre-clinical subjects. There is no doubt about it. With laboratory experience alone you may make great scientific discoveries; with little knowledge of science and an empirical knowledge of medicine and skill in dealing with your fellow men, you may be a brilliantly successful practitioner; but without the combination of the two you will never become the ideal doctor, in whatever direction your work may lie.

To take examples in the history of medicine in the short period since the war. The discovery that rickets can be cured by ultra-violet rays is largely a question of physics; the isolation and preparation of insulin is a pure problem of chemistry; biology, physiology and comparative anatomy and embryology are so intimately connected with medicine that there is no need to labour the point.

Lest you should think these are views put forward for your instruction, I will quote the words of Sir William Osler, the late Regius Professor of Medicine at Oxford and the author of one of the greatest text-books of medicine ever written, in a New York Medical journal. "The study of physiology and pathology within the past half century has done more to emancipate medicine from routine and thraldom of authority than all the work of the physicians from the days of Hippocrates to Jenner, and we are as yet upon the threshold." And a few years later, "A man cannot become a competent surgeon without a full knowledge of human anatomy and physiology, and the physician without physiology and chemistry flounders along in an aimless fashion, never able to gain any accurate conception of disease, practising a sort of pop-gun pharmacy, hitting now the malady and again the patient, he himself not knowing which."

Often you will hear against the value of your earlier studies; chemistry teaches this, physiology that and medicine yet a third view. This may be true of bad physiology, bad medicine or bad surgery, but the truths of good chemistry, physiology, medicine or surgery are the same.

May I finish with another quotation from the same address of Sir William Gull? "The foundation of the study of Medicine as of all scientific enquiry lies in the belief that every natural phenomenon, trifling as it may seem has a fixed and invariable meaning;—a flitting pain or other scarcely noticeable inconvenience being like the form of a summer cloud or the inconstant currents of the air, the result of laws as durable as those which sustain the more solid and immovable structures of the world. The problem of their solution may be infinitely complicated, and often beyond the reach of our present means of knowledge, but we may surely conclude from analogy that they result from some simple and unchangeable laws."

From the day you start the study of medicine until you are carried into your grave after, I hope, a white haired and honoured old age, Nature should be the object of your study and Nature is the same in the laboratory or by the bedside.

The Borough.

Epistle to Freshmen.

Poor, prosaic, inexperienced youths! Your people live in Hampstead, Highgate, or the more cultured parts of Cricklewood and there, between terms, you have spent your adolescent ease. You have seen life, so you think, between the "Corner House" and the "Coliseum." Actually you have basked in the sunshine of the commonplace. You only know London proper. Have you ever seen the "Elephant and Castle?" Have you ever sauntered after dinner down the Old Kent Road? Have you bought your clothes in the New Cut or looked for book bargains in the Lower Marsh? Have you ever heard of the "Dog and Duck," or had a "double" in the "Ship and Shovel?" In one mighty chorus you shout "No." You are the sons of the dull, commercial London proper, but now you are to spend your days in London improper. In the Middle Ages the men of imagination could not abide your smug respectability; they came, bishops, convicts, literary men and inn-keepers, to the Borough, which is now to be your

workaday home. The Borough is now to embrace you; be wise and take the Borough to your hearts.

Next time you cross London Bridge with Eason on "Eyes," or Cook on "Chickens," under your arms look Southwark full in the face. Remember that for a thousand years London Bridge was the only bridge crossing the Thames in London. Then look at the square tower of the Cathedral—that ancient fane which stood so proudly before men began to build the Abbey in the west. Steal in one day when no one is looking and tread the aisles which knew the footfall of greater men than you. Climb the tower and look upon the desolation wrought by modern industrialism. Then take a walk one day along Bankside and dream yourself into the days of Elizabeth. Remember that Shakespeare spent his days of maturity on the Bank. In London proper he is forgotten. There they produce "The Young Lady in Pink" and "Gertie Gordon's Grievance." To London improper belongs the privilege of keeping green the memory of the immortal Will.

In Park Street you will find a wall memorial which announces, "Here stood the Globe Playhouse of Shakespeare." To the Bank he came in 1590 to play for a season at "The Rose," which stood in the Rose Alley of to-day. At that time he lived "by the bear gardens," and you will find a narrow court bearing the name Bear Gardens still. Shakespeare's great days on Bankside began in 1599 soon after his fellows plucked down the timbers of "The Theatre" in Shoreditch and carried them over London Bridge to be set up afresh as "The Globe." To this place came Massinger, Fletcher and Edmond Shakespeare, all of whom are buried in the Cathedral of to-day, but the Parish Church of St. Saviour of bygone times. Near at hand you will find Clink Street, which marks the site of the Clink Prison where many a young pleasure-seeker from the City spent a period under restraint. It belonged to the Lords of the Manor, the proud Bishops of Winchester, parts of whose palace remain to-day within the walls of Pickford's warehouse.

On another day stroll down the Borough High Street. Note the houseless passage, Counter Street, on the right. It marks the spot where stood the Counter Prison of another period. On the left hand side seek for George Yard. Within it stands the only coaching inn left in London. It only retains a tithe of its former glory, but it is worthy of your attention. In the Middle Ages the main thoroughfare was the home of countless inns which provided for the Canterbury Pilgrims and for business people bent on visiting the South Coast towns. All these inns including the "George" and Chaucer's "Tabard" were burnt down in a fire in 1676. A few were rebuilt on the old model, but of these the "George" alone remains. The "Tabard" is a modern public house which should not be passed lightly for it stands on the site of the old hostelry where Harry Baily presided in 1380.

Going directly south within a few yards of St. George's Church you will find some narrow courts. They stand upon the site of the old Marshalsea jail, parts of which may be seen by the discerning eye still. Here Dickens' father found rest if not comfort. At an earlier time Bishop Bonner spent the last ten years of his life here and was buried at midnight in the churchyard which stands near. Passing St. George's on the right hand side there lived those two Guy's men, Ben Allen and Bob Sawyer. In Lant Street, too, Dickens lived while his father was in jail. But his house is no more.

At the end of this pilgrimage retrace your steps to Guy's. When you reach St. Thomas' Street remember the murdered Archbishop Thomas of Canterbury The good monks of Southwark named their hospital after him as early as 1228 A.D. It had existed long before and probably before Bart.'s was dreamt of, but it gained a new name in the 13th Century. On the left hand side notice the Church of St. Thomas, now the Cathedral Chapter House. It was once the chapel attached to St. Thomas' Hospital which was the mother of Guy's. The present building only dates back to 1702 A.D., and was rebuilt at the time when the adjacent old-world houses were set up. About that time a wealthy City bookseller, desiring the credit of association with the Borough, became a Governor of St. Thomas'. His name was Thomas Guy. He built three new wards for St. Thomas' and then bought a parcel of land from his fellow Governors in order to build a hospital for people outside the scope of the more ancient foundation. His building was finished towards the end of 1724, and early in the following year it was opened, not to compete with its mother house, but to assist

in the good work. Alas, Guy did not live to welcome the first patient.

For the present, farewell. You have come to no discreditable neighbourhood, to no hospital without traditions, to no part of London devoid of atmosphere or dignity. I will not repeat "Take the Borough to your hearts." It will not be necessary.

T. P. STEVENS.

"Pursued by Bandits"

(A True Story with a MORAL.)

(Continued from our last number.)

The Clinical Assistant having been quickly admitted, to the undisguised mistrust of the two constables, found himself precipitated into an atmosphere of intense excitement. In the front room the Doctor, with quivering stethoscope, was endeavouring to hide his anxiety under a cloak of professional dignity, while the repeated excursions of Mr. Johnson from the back room into the hall showed that the psychic influence of the situation had also affected him. Meeting him thus in the Hall, the latest arrival, who, it must be confessed, had called in all innocence to pay a friendly evening visit, engaged him in conversation. A raconteur of great charm, he soon had Mr. Johnson absorbed in his tales of the older Borough families, of the Symeses and the Fergusons, the immigrant members of the Cephalo tribe and the little nigglers that one met in every street.

The examination in the front room had, meanwhile, progressed to the stage when it was necessary for the client to undress, and the Doctor left him to do so, laying great stress on the necessity for the removal of his trousers, and telling him to knock on the door when he was ready. He then went out, turned the key softly in the door and visited the back room to extract a cheque from Mr. Johnson in return for his own of two weeks back. There are fewer pangs of conscience in a thorough-going bandit than there are pats of butter in the nurses' home, and the cheque was handed over with the best grace in the world, in fact, as readily as it was returned from the bank a few days later. Johnson (notice how his stock has been falling since you first knew him as Mr. Thorpe-Johnson); Johnson then thought that he was escaping lightly from the righteous wrath of his intended victim. He did not know that the two detectives had now arrived and were stationed, with characteristic *sang froid* and *savoir faire,* one at each door. The Doctor, placing the cheque in his pocket, placed the stage-management in other hands, and Johnson received his receipt in the form of the massive detective.

Long association with the Hospital has made me tender-hearted. Even now I cannot bring myself to relate the heart-rending scene that followed; how the detective read a long thesis on the advantages of a night spent in the Borough High Street cells and the possibility of any opposition to the movement being to the opposer's disadvantage; how poor John listened dejectedly from his chair and could only answer, "What about Mr. Welwyn"; how Mr. Welwyn, being naked, beat loudly on the door, crying, "Doctor, I'm ready," and the detective, being equally ready, arrested him in *pueris naturalibus.* These things are too poignant for so heroic a story, and I lead you gently from the scene, while the special squad of the Hospital Constabulary march triumphantly down the stairs and the Doctor sits once more at the desk in his consulting-room.

MORAL.

Reader, this moral is not for you. That you have read as far as this proves you to be in possession of all the attributes of a blameless life. It is for those, who have not read my tale, that they may know how sin is its own betrayer and virtue only a fraction of its own reward. Johnson, that man of misfortune, is loved by his warder and now lives a blameless life, but he is not happy. Even the fact that he will soon be able to take out a policy for a first-class life and take in a pleat in his nether garments consoles him but little for his lost liberty. But the Clinical Assistant, the man who radiates through this dark story like the Dewar Scotsman through a river mist, how is he rewarded for his version of the affair. Alas! I cannot tell you; but that some recognition, greater than even you have guessed, is to be his lot will be evident when I tell you that shortly after the great drama he was urgently wanted on the 'phone by the Queen's Sister.

THE END.

THE GIMLET.

A Case of Lead Poisoning.

CLINICAL LECTURE BY DR. J. A. RYLE.

GENTLEMEN,—The patient whose history I am about to relate was recently under my care in Esther Ward, and some of you will have had the opportunity of examining her there. Her death, which took place after a long illness, enabled us to verify certain pathological changes which we had predicted, and confirmed us in our view that her symptoms were attributable to chronic plumbism.

The introduction of industrial legislation, and of many improvements in the manufacture and employment of lead products, was the direct outcome of medical researches into lead-poisoning. A steady fall in the incidence of the disease has resulted. Whenever you read in lavatories and bathrooms the legend "Leadless Glaze" you may visualise numerous men and women spared from the agonies of colic, the incapacities of wrist-drop and anæmia, and other more serious and lasting disabilities. Plumbism has indeed become comparatively so rare that it behoves us, for our own instruction, to study isolated cases the more carefully.

In the case in question I was at first inclined to discuss some alternative diagnoses, and it is not without significance that the patient had been attending a special heart hospital. She was transferred from there to my Out-Patients by Dr. C. H. Atkinson, who thought she should be investigated from other than purely cardiological points of view. Mr. A. C. Hampson has written an admirable clinical report from which I shall quote at length, and was also responsible for the blood examinations.

The patient's age was thirty-seven. She was married and had one child, aged ten years. She had had no illness of account prior to the birth of her child, and did not herself recognise the development of more serious symptoms until about two years ago. Shortly after the birth of her child she had a sudden attack of pain in the lower abdomen, and she volunteered the statement that the pains were "far worse than labour pains." She was "doubled up" in the attack, which lasted for some hours, and for weeks afterwards had abdominal tenderness. She had similar attacks in August, 1922, and February of this year. The attack last year came on suddenly while she was out shopping, and lasted twelve hours. It was not accompanied by nausea or vomiting, but had been preceded by constipation. In August, 1922, and February, 1923, she also had severe "floodings" and became very pale. After the second one she was curetted in the Grosvenor Hospital, and up till the time of her admission to Guy's there had been no more loss of blood. Although she much wanted another child there had been no further pregnancy. For as long as she could remember she had been short of breath on hills and stairs, but latterly had been dyspnœic even on slight exertion; had been wakened at night by "breathless attacks"; and troubled with palpitations and swelling of the feet. On one or two occasions she had either coughed or retched up blood-stained mucus. She had noticed frequent micturition for a year, and was compelled to get up for this purpose two or three times at night, passing a large volume of water.

On admission we were especially struck by her pallor, which affected the mucous membranes as well as the skin. The ankles were swollen and pitted on pressure. The teeth and gums appeared free from gingivitis or pyorrhœa, but at a distance of about one millimetre from the actual gum margin, in both the upper and lower jaw, was a well-marked "blue line." Inspected through a lens it was seen to be not perfectly continuous, but in places dotted and broken. At one point in the lower alveolar margin some small branching vessels appeared to terminate in the blue line.

Abdominal examination was negative except for showing tenderness in both iliac fossæ, and a just palpable spleen. The heart was definitely enlarged to the left and a forcible impulse could be best felt in the fifth space, five-and-a-half inches from the mid-sternal line. There was a soft apical systolic murmur, and the aortic second sound was accentuated. The blood pressure registered 200 mm. of mercury, systolic, and 115 mm. diastolic. Moist sounds were audible at both bases and in the right axilla. The urine was pale and of specific gravity 1012. No sugar or acetone bodies were detected, but albumen was present to the extent of four-and-a-half parts per thousand (Esbach). The centrifugalised deposit showed many leucocytes and a few red cells, probably of vaginal origin, for a later specimen ob-

tained by catheter showed neither cells nor casts.

There were no signs of organic disease of the nervous system, and except for an account which she gave of some weakness in the hands, and a tendency to drop things a few months previously, there was nothing in the story to warrant a diagnosis of past peripheral neuritis. Examination of the fundi revealed no retinitis or optic neuritis.

At this point the picture which confronted us was that of a comparatively young woman with clear evidence of renal disease, a very definitely raised blood pressure, an hypertrophied heart, and a severe anæmia. The type of renal damage suggested by the polyuria and the cardio-vascular signs was a chronic interstitial nephritis. With this type of lesion a secondary anæmia is not uncommon, so that even taking the blue line into account we were not immediately justified in attributing all the symptoms to plumbism. The relationship of lead to this form of renal disease we will discuss more fully later.

Dr. Ryffel found the blood urea to be increased to 2·46 grms. per 1,000 c.c., or eight times the normal figure. Such grossly pathological retention of urea only served to confirm the view that the kidneys must in all probability be of the contracted "granular" variety. The finding was also of very grave prognostic import, signalling the likelihood of an early death from uræmia. The urine was not examined for lead. This is an uncertain undertaking at any stage in the disease, and in the late stages of chronic plumbism lead is scarcely ever found. The report on the stools which we sent to be analysed for lead has not yet been received.

Examination of the blood showed:—hæmo—globin, 45 per cent; red cells, 3,020,000; colour index, 0·7; white cells, 6,565.

A differential count gave a slight polymorphonuclear increase. Films showed poikilocytosis, a few nucleated red cells, and *much punctate basophilia*. The cell distribution was that of a secondary anæmia.

Punctate basophilia in association with a marked secondary anæmia was the next point in favour of lead-poisoning. I shall refer more fully later to its diagnostic value. A film is here for you to inspect after the lecture.

The moist sounds in the right axilla, which had attracted our attention unduly at Out-Patients and caused us to consider the possibility of an active lung lesion, we now assumed to be due to pulmonary œdema; they disappeared shortly after admission, but tended to re-appear from time to time.

About a month after her admission to Hospital the patient developed further hæmorrhage from the uterus and her condition rapidly deteriorated. She was transfused, but the benefit—as was to be expected—was shortlived. At the same time she complained of headaches, and a little later involuntary twitching of the arms was observed. Both of these symptoms were clearly uræmic.

On August 8th she became comatose and died in about twelve hours. The post-mortem examination, performed by Mr. H. Vertue, revealed the following changes:—

The heart was greatly enlarged, the left ventricle showing much hypertrophy; heart muscle pale; both lungs were œdematous, and there was blood-stained froth in the bronchi. Both kidneys were of small size; the right kidney was very much smaller than the left, measuring only about $1\frac{1}{2}$ inches by 1 inch; both were pale and mottled, and there was on section very poor definition between cortex and medulla; the surface of the left kidney was granular and the capsule stripped with difficulty. The cavity of the uterus contained pus, and there was a left-sided pyosalpinx.

I have here the kidneys and the heart for you to examine, and also a section under the microscope prepared by Professor Stokes which shows, as you will see, very little remaining kidney substance.

These findings merely served to confirm the diagnosis of "chronic interstitial nephritis with left ventricular hypertrophy" made during life, and we still have to weigh the evidence for and against the view that the changes in question were due to lead absorption.

You must have remarked that I have so far made no mention of one very important point—namely the patient's occupation, or of other factors in her life which might have exposed her to the risk of lead-absorption. This is where our chief difficulty arose, and for a time a link in the chain of argument seemed missing.

The trades in which lead-poisoning most frequently occurs, are those concerned with the handling of red and white lead, glazing,

painting, plumbing, printing, smelting, and the manufacture of lead accumulators.

The most frequent path of absorption is probably the respiratory tract, though for a long time it was supposed that ingestion from contaminated food and fingers was more important. Goadby showed not only that lead-poisoning occurs more often in the dusty lead processes, but, by animal experiments, that from ten to twenty times as much could be given via the gastro-intestinal tract, before symptoms were produced, as could be given by inhalation.

Our patient had never engaged in any of the trades mentioned.

Cases have also been reported as resulting from the drinking of water from lead cisterns or obtained through lead pipes, but our enquiries did not suggest such an accident, and the patient had been living in a London house with the general water supply for many years. Her husband and child had never had any symptoms of plumbism, and her husband showed neither a blue-line nor punctate basophilia. On the other hand she stated that her father, who used to live in the same house, and was a printer's compositor, had a blue-line and was at one time diagnosed at St. Thomas's Hospital as lead-poisoning, though he actually died of carcinoma coli. She did not handle or wash his clothes. I have recently questioned her husband again more closely. He is a tin-smith, and his work includes tinning and soldering. He states that there is a distinct possibility that his clothes might become impregnated with lead dust, and that his wife always washed his clothes. Cases of plumbism due to the handling or washing of clothes in the wives of lead-workers have been described. Assuming her intoxication to have occurred in this way it might seem surprising to you that she should have acquired lead-poisoning while her husband escaped. It has, however, been established not only that there is considerable variation in the susceptibility of individuals, but that women are much more susceptible than men. It has also been stated that tinning processes tend rather to produce insidious damage, while absorption of soluble lead salts, as in white-lead workers, produces the more acute symptoms, such as colic and drop-wrist.

In our case the clinical history certainly favours a long-continued or repeated absorption of very small quantities rather than one or more attacks of definite poisoning.

Acute lead-poisoning, which may sometimes pass on into a more chronic phase, has been caused not infrequently in women by the taking of lead in the form of diachylon to induce abortion. Our patient, so far from ever having desired to induce abortion, had longed for more children. Her disappointment may indeed have been due to accidental absorption of lead over a long period, for it is well-known that women with lead-poisoning do not readily bear children, and if pregnant rarely go to term.

Apart, therefore, from this not too convincing history we are left as the basis for our argument with one subjective symptom—her abdominal pain, and three objective manifestations—the blue-line, the basophilia and the nephritis. I propose to examine these a little more critically.

The Colic.

Lead colic, the "dry-bellyache" of John Hunter (a term which he employed to distinguish it from the dysenteric colics) does not differ in character from other intestinal colics—except perhaps in its severity. This may be so extreme that it may lead to a laparotomy for supposed peritonitis. In this connection I remember that we always had impressed upon us as ward clerks and dressers the importance of examining "gums and jerks" in the acute abdominal emergencies. No doubt the same good rule is preached to you. The pain is chiefly felt in the lower abdomen, and this suggests that the colon, into which a great deal of the excretion of lead takes place, is principally affected. The pain is commonly, but not always, relieved by pressure. In addition to the more acute and agonizing forms a chronic and less severe type is also described. During an attack the pulse-rate is slow—sometimes very slow—rates of 30 and under being recorded. Amyl nitrite, morphia with atropine, and purgation are held to be the most effective remedies.

We cannot regard the description of an attack which occurred ten years ago as reliable evidence, but our patient recollected that the pain was in the lower abdomen, and that it was "worse than labour pains" and "doubled her up." We should, perhaps, lay still smaller stress on her more recent attacks, for they

may possibly have been related to her Fallopian tube infection, though I rather suspect that this too was terminal.

It is highly probable that the beginning of her lead-absorption dated as far back as her original attack of pain, for the renal changes must have been developing for a period of several years.

The Blue-Line.

There is no doubt in the first place that this was a genuine one. In the presence of the dusky purple gum margin of gingivitis and pyorrhœa it may not be so easy to be sure of the sign, but, rather unusually, in our case the gums were in other respects remarkably healthy. The blue-line is due to the deposition of lead sulphides dependent on the decomposition of débris in unhealthy gums with production of sulphuretted hydrogen. It is for this reason that the sign is much more common in subjects with pyorrhœa. It has even been stated by some observers that it never occurs where the gums are healthy, though Oliver denies this. The blue-line is characteristically situated in, or a short distance from, the free margin of the gum (not in between the gum and the teeth). The colour is a slaty-blue, and the line is stippled or dotted as seen through a lens. According to Hilton Fagge this last peculiarity was first noticed by Sir William Gull.

The close relation of the deposits to the capillaries has suggested that an excretion of lead from the blood vessels may take place.

As already mentioned in our patient, some small branching vessels appeared to terminate in the blue-line at one point, and the absence of gingivitis and pyorrhœa rendered the feature more easily demonstrable. We must next ask whether the blue-line is necessarily a sign of lead poisoning. Legge and Goadby in their interesting monograph on the subject, and also Oliver, are emphatic it is not necessarily so and regard it merely as an indication that the subject has at some time or other been exposed to lead-absorption. Here is a water-colour sketch of the blue-line taken from a patient under the care of Dr. Addison in 1857, and also a coloured plate from Osler and McCrae's "System of Medicine."

The Punctate Basophilia.

This condition of the red cells is found in other secondary anæmias besides that due to plumbism, and is seen for instance in the anæmia following malarial infections. We are perhaps most familiar with it in Addison's anæmia. No confusion, however, with Addison's anæmia can exist in this case. The actual number of basophile cells seems to be important, and Legge and Goadby quote Schmidt as saying that when the basophile corpuscles reach 100 per million of red cells the cause is undoubtedly lead-poisoning. In our patient Mr. Hampson recorded "much punctate basophilia," probably, he thinks, exceeding this figure. Goadby mentions a lymphocytosis in lead anæmia. Oliver says the increase may be in respect either of lymphocytes or polymorphonuclear cells. The relative polymorphonuclear increase in our case may have been due to the pyosalpinx.

So important an indicator of lead-absorption has basophilia been regarded in Leipzig that it is customary there to make periodic blood examinations on the leadworkers, and when the number of cells containing basophile granules exceeds 100 per million the individual is removed from work and given appropriate treatment. By this means the number of cases of actual lead-poisoning has been reduced.

Finally let us consider the nephritis.

The Nephritis.

The important points in our case were, I think, that the patient was too young to have developed a secondary arteriosclerotic kidney, and that she had had no other pre-disposing illness, such as scarlet fever, which might have given rise to renal damage.

Before accepting it as proved that a comparatively common lesion like chronic interstitial nephritis may be caused by lead-poisoning we require evidence that the condition is actually more frequent among lead-workers than among the general population. For a long time the clinical association of the two conditions has been remarked. According to Legge and Goadby's figures the deaths from Bright's disease in lead-workers as compared with the deaths from Bright's disease among all males are roughly as 4 to 1.

In conclusion then it would be fair to say that on the history of possible colic, or on the blue-line, the basophilia, or the nephritis alone, we should scarcely have felt justified in diagnosing plumbism; but the combination of these phenomena in the wife of a tin-smith

seems to me to place the diagnosis beyond dispute.

The title of the lecture is nevertheless open to criticism, for we were not so much dealing with a case of lead-poisoning, as commonly depicted, as with the final end-result of a slow and prolonged lead-absorption. Just as the scarred and narrowed mitral valve and its accompaniments can hardly be classified under the heading of rheumatic fever, so too the scarred fibrotic kidney and its accompaniments can hardly be fittingly grouped with the disease whose chief features include drop-wrist, colic, constipation, headaches, loss of weight, and anæmia, and from which in the early phases and with appropriate treatment complete recovery is possible.

In the late stage of the disease in which our patient came to us it was obviously futile to expect any good results from attempts to encourage elimination of lead from the tissues. If she had come under medical observation at the time of her original attack of abdominal pain it is possible that a careful examination might have revealed the blue-line and averted the subsequent arterio-renal damage which caused her death.

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A Case of Splenectomy for Spleno-Medullary Leukæmia.

K.S., a single woman, aged 24, was admitted into Queen in March, 1923, complaining of swelling of the abdomen and six months amenorrhœa.

On examination, a large, hard tumour was felt extending between the left costal margin and the pelvic brim. The tumour was felt in the Pouch of Douglas on vaginal examination, and was found to be separate from the uterus.

A diagnosis of pregnancy was suggested at first, but was ruled out, as there were no confirmatory signs.

A laparotomy was performed, and the tumour was found to be an enlarged spleen, normal in colour and consistency. It was in no way adherent to the parietes, and was easily delivered and removed.

A section of the organ showed œdema and infiltration, with leucocytes which were of the nature of myelocytes.

The patient made a good recovery, and is now back at her work. Her periods returned in July, and have been normal and regular since.

A series of blood examinations were made, commencing immediately after the operation

	Reds.	Whites.
March 14th	3,200,000	200,000
March 17th	3,300,000	100,000
March 21st	2,200,000	146,000
March 28th	3,600,000	131,600
April 7th	3,100,000	74,000
June 6th	2,900,000	47,000
Sept. 4th	2,416,000	121,600

So far, then, there has been, on the whole, a reduction in the number of white cells, but a steadily progressing anæmia.

Examination of films shows about 41 per cent. polymorphs, and 50 per cent. myelocytes, and all give a strongly positive oxidase reaction. There are many nucleated reds present. I have to thank Mr. Bellingham-Smith and Dr. Ripman for permission to publish this case.

The literature on the subject is very limited, and the cases reported in detail are very few. One of the earliest was a case under Mr. Bryant at Guy's, in 1857. He removed the spleen in a case of leukæmia, but the patient died in hospital. The spleen is still in the museum.

A second case, apparently more successful, was reported by an American surgeon in 1900. His patient survived four years after the operation, and died eventually with all the signs and symptoms of tabes. Her blood picture returned to normal after removal of the spleen, but she refused to have further blood examinations.

In 1898 a French surgeon collected 31 cases, of which three only survived the operation. One was eventually proved to be a case of Banti's disease; one died after eight months with typical signs of a rapidly fatal leukæmia; and the third was improved for three years.

It is obvious, therefore, that the case quoted cannot be cited as one in which a cure has been effected, but I think its rarity and, at any rate, immediate success, are some excuse for its publication.

J. J. LEWINSTEIN.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

GUY'S HOSPITAL BIENNIAL DINNER

Wednesday, October 17th, 1923.

DEAR MR. EDITOR,—I am greatly indebted to you for so kindly inserting my previous letters in the GAZETTE.

I am now sending you a list of the names of Guy's men who have already signified their intention of coming to the Dinner.

In many instances men have asked to sit next some friend who has not yet sent in his form of application, so that the absence of these Guy's men from the Dinner would be a source of disappointment to many. I hope, therefore, that those men who are coming will see to it that their friends are urged to come also.

The Biennial Dinner is a splendid opportunity to renew old friendships, and I hope that all who are still hesitating over their decision as to whether they will attend or not, will now help to make this a record success, by adding their names to the list and applying for tickets.

If any of your readers, medical or dental, have not yet received an invitation form, I hope that they will send me a post card with their name and address, and I will then communicate with them at once.

Yours sincerely,
ARTHUR W. ORMOND,
Hon. Sec.

LIST OF GUY'S MEN WHO HAVE SIGNIFIED THEIR INTENTION TO ATTEND THE DINNER.

1854—1879.

1854†Dixon, John.
1869 Durham, Frederick.
Bird, Tom.
1871 Burroughs, J. E. B.
1874*James, Col. Culver.
1876*Mansell, E. R.
Dring, W. E.
Oram, R. R. W.
1878 Beale, E. Clifford.
Leigh, W. W.
1879 Hale-White, Sir Wm., K.B.E.

1880—1889.

1882*Sells, H. T.
Howell, James B.
1884 Counsell, H. E.
1885 Price, Alfred E.
1886 Tubby, A. H.
Sandoe, J. W.
1887 Beard, Frederic.
Holloway, S. F.
1888 Randall, Philip N.
Marriott, H. B.
1889*Holman, H. J.
Poole, R. G.
Black, G.
Beyts, Col. W. G., C.B.E.
Rouw, R. Wynne.

1890—1899.

1890*Pilcher, Col., C.B., C.B.E., D.S.O.
Stevens, T. G.
Fawcett, John.
1891*Roberts, C. Gordon.
Hopson, Montagu F.
Jewell, J. W. F.
Parfitt, J. B.
1892 Daldy, A. M.
Young, F. C.
Floyd, S. G.
1893 Keay, Colin.
Eyre, John.
Wilson, F. Wallace.
Jewell, W. H., O.B.E.
1894 Allport, A.
Bryant, Charles.
Collier, H. W.
Robinson, W. E.
1895*Key, M. A. Aston.
Tyson, Wilson.
*Clarke, A. V.
Ashwin, R. H.
Ensor, C. A.
Beadnell, C. Marsh, Surg. Rear Admiral.
Steward, F. J.
1896*Howell, John, C.B.E.
Tebbitt, Ernest, R.
Hinchcliff, C. J.
Spriggs, Edmund.
Knowles, C. H.
Fagge, C. H.
Partridge, A. H.
1897*Starling, H. J.
East, W. Norwood.
O'Meara, L.-Col. E. J. O.B.E.
Way, Montague.
1898*Barrow, Lt.-Col. H.P.W., C.M.G., D.S.O.
*Swan, R. H. Jocelyn, O.B.E.
Turner, Philip.
Moore, P. W.
Wernet, A. J., Srg.-Cpt. R.N.
Wills, W. Kenneth.
Henson, W. J.
1899*Pearce, F. J.
Berncastle, H. M.
Kirkman, A. H. B.

1900—1909.

1900 Gray, Major A. C. H.
Goble, E. W.
Thomas, T. P.
Clarke, Edward.
Marriott, Oswald.
French, Herbert.
Parrott, H. McDowell.
1901*Atkins, Sir John, K.C.M.G.
Hardenberg, E. J. F.
Tilbury, R.
Bent, S. C. H.
1902 Pinching, Charles.
Shipway, F. E.
Morgan, T.
1903 Spriggs, N. I.
Robinson, G. C. F.
1904 Griffin, E. H.
Hurst, A. F.
Routley, E. W.
Hughes, Frank P.
Mollison, W. M., C.B.E.
1905*Harrison, E. M.
Cameron, H. C.
Lowe, E. Cronin.
McBride, John.
Mills, Major P. S.
1906*Johnston, Prof. T. B.
Goodhart, G. W.
Vandermin, H. F.
Malleson, H. C.
Litchfield, P. C.
Bankart, A. S. Blundell.
Ripman, C. H.
Palmer, A. S. Morton.
Stebbing, George F.
Davies-Colley, R.
Bookless, J. S.
1907 Carr, T. E. Ashdown.
Jones, C. E. M.
Dryland, G. W.
Aubrey, H. P.
Carlill, Hildred.
Watson, J. F.
1908*Denning, A. F. W.
Seymour-Price, P.
1909 Brook, Stanley.
Lees, A. Everard.

1910—1919.

1910*Elliott, E. L.
Bromley, L.
Yerbury, E. O.
Adams, F. S.
Mullally, G. T.
1911*Werner, H. P.
*James, H. L.
Messenger, H. L.
Cook, Frank.
Sandison, Alexander.
Jepson, A. C.
Mutch, N.
Daw, Hubert.
McNair, A. J.
Hind, G. R.
1912 Hoby, H. J.
George, W. Stanley.
Slesinger, E. G.
1913*Moberley, A. V.
Tanner, W. E.
Ryle, J. A.
Roberts, C. S. Lane.
1914*Pritchard, G. B.
Symonds, C. P.
Hearn, R. J.
Stallman, J. F. H.
1915*Kendall, N. E.
*Curle, R.
1916 Halden, Richard J.
Bates, K. L.
Jones, J. Gaymer.
1917 Conybeare, J. J.
Bulleid, Arthur.
Woodruff, Keith M.

1920—1923.

1920 Turner, T.
Crisp, Eric J.
1921 Hodgkinson, R. J.
Myatt J. H. D.
Smith, J. Stuart.
Noott, Geoffrey.
Richardson, Philip L.
Watson, L. K.
1922 Williams, H.
Allin, J. F.
Moore, B. R.
Sharvill, K. G.
Sharpe, D. G.
Nuthall, E. T.
Hooper, K.
Biddle, E. J.
Richards, E. H.
1923 Lloyd, E. A.
Bingay, J. V.
Ballard, R. C.
Widgery, F. W.
Jackson, M.

*President of the Residents.

* Vice-Chairmen. † Date of Qualification.

Also Viscount Goschen, Major Reginald Bonsor, Canon J. B. Haldane, Major Oswald Maguire., Sir E. Cooper Perry, H. P. Shepherd, Esq., Sir Charles Stewart, K.B.E., W. J. Walford, Esq., F. P. Whitbread, Esq., and the Editor of the Guy's GAZETTE.

Guy's as a Power in the Athletic World,

DEAR SIR,—Will you allow me a small space to raise a subject that is closely associated with the high position held by Guy's in the athletic world. It has long been recognised that our Hospital Athletic Clubs must be taken seriously in every branch of sport, and that from rugger, in which we yearly supply one of the best clubs in the country, down to fencing, the latest formed club, it is not safe to oppose us with a second-rate team. This reputation is by no means lost by the Athletic Club, which has at various times produced athletes of outstanding merit, from H. A. Munro, a champion three-miler of the 'eighties to C. L. Stefyn, one of the finest sprinters in England to-day. It carries with it a responsibility. No man can rise to a great height in his profession without influencing by his example those who are below him in ability and success. Similarly no body of men can attain a prominence in the world of sport, and still hide its actions from its followers.

I have received from Gen. R. J. Kentish, C.M.G., D.S.O., a circular letter, issued to all the Hospitals, Universities, and Public Schools of Great Britain, appealing for funds to equip, train, transport, house and feed the teams, which will represent Great

Britain at the Olympic Games at Paris next year. At the last meeting in Antwerp, in 1920, the British teams were handicapped by a lack of funds, and so competed at a disadvantage. In spite of this, our athletes achieved some remarkable successes, and after many a final the Union Jack was hoisted to the top of the flag-staff, indicating another victory for Great Britain. Next year it is confidently hoped that we shall field a team, second to none in training and equipment, and to this end the fund, mentioned in the circular letter, has been raised. The other recipients of the letter are responding nobly. Donations from Oxford and Cambridge have already been received, and I feel sure that we, as a sporting and patriotic body, shall not be behind them in supporting this most excellent institution of the Games. The feeling of friendship that existed between the competing teams in Antwerp was in itself sufficient justification for the holding of these four-yearly meetings; the loudest applause for one country's success always came from the supporters of its rivals.

That the final list of subscriptions should be published without including the name of Guy's Hospital is impossible. Large donations are not expected, but the very smallest will be gladly received as a sign that Guy's is in sympathy with the greatest of all athletic contests.

Donations may be sent to me, and will be acknowledged, through your kindness, Mr. Editor, in these columns.—Yours faithfully,

LESLIE G. HOUSDEN.

Guy's Hospital, S.E.1.

DEAR SIR,—I would like to support the suggestion by Mr. H. Gordon Spain that a Guy's Lodge of Freemasons should be formed.

After reading Mr. Spain's letter I could not help wondering why the suggestion has not been previously made, but now that it has come I am confident many Guy's men will regard it with favour, and be prepared, as I am, to do all they can to help it along.

If such a Lodge is formed it must, of course, be on broad lines with no possibility of favouritism, and if this is done I am sure it will be a great success.

I hope more Guy's men will communicate with you on the subject, and I venture to suggest that a meeting of Guy's men who are already masons should be convened at an early date to discuss the proposal.—Yours faithfully, HERBERT A. SPOUSE,

Cambridge House, P.M.Derwent 40.
18, Cambridge Road, Hastings.
September 20th, 1923.

SIR,—The letter from Mr. Gordon Spain in a recent issue raises a question that generations of Guy's men have asked in vain. Why is there no Guy's Masonic Lodge? Why does Guy's stand alone amongst the larger London Hospitals lodge-less? The answer that was given to me some twenty years ago was that there exists a Lodge which meets in London to which most Guy's men belong. This is a fact; but one often comes across old Guyites who belong to other lodges, many of whom are past masters; indeed, altogether there is a large body of distinguished masons in London and the Provinces.

Now, Sir, can anything be done towards a meeting of Guy's masons to discuss the matter? It is obvious that no amount of correspondence will evolve a definite scheme, but an hour's discussion might prove fruitful, and it would at least have the advantage of sensing the general opinion of the members.—Yours faithfully, P. SEYMOUR PRICE.

41, Sloane Gardens, S.W.1.
September, 1923.

A Case of Anaphylaxis.

The following case of anaphylaxis presents some points of interest and seems worthy of record.

The patient, a medical man, aged 30 years, was admitted to hospital on 7th September, 1922, suffering from a condition of anaphylaxis.

Family History.—On the maternal side there is a history of tuberculosis. Mother and father are both healthy. One brother suffers from orthostatic albuminuria associated with œdema of the legs. Another has a chronic chest condition of an intermediate character. Other brothers healthy, but all show marked enlargement of the superficial lymphatic glands.

Personal History.—From between the ages of 12—15 years, suffered from attacks of præcordial pain and tachycardia, for which periods of rest up to about 3 months were ordered on four occasions. No evidence of any heart lesion was present. The superficial lymphatic glands, particularly the inguinal group, have always been enlarged.

About the age of 20 years discovered he was suffering from orthostatic albuminuria, which has persisted up to the present time. In March, 1917, 2,000 units of antidiphtheritic serum were introduced into the subcutaneous tissue of the abdomen for sore throat, with fever and pains in the back and various joints. No ill effects were noted from the serum,

although the condition of the throat was not improved.

In June, 1917, he was slightly "gassed" and slightly wounded. Antitetanus serum was injected and patient continued duty for an hour or two when he suddenly became flushed, giddy and dyspnœic and was put to bed, where he remained for seven days. A day or two following the injection the right arm became very œdematous, reddened and an urticarial rash developed over this area, but nowhere else on the body. When he recommenced duty tachycardia developed and persisted for three days.

History of present disease.—On September 4th, 1922, while enucleating septic tonsils, patient received two slight punctured wounds on the left index finger. One was treated with iodine, but the other escaped notice. The following day this wound became septic and streptococci and staphylococci were grown from the pus.

On the 7th, pain was noticed in the axilla, and a profuse growth of streptococci, similar to that from the tonsils, was grown from the pus. 10 c.c. of anti-streptococcal serum were injected into the right forearm about mid-day. About 2.30 p.m. patient became flushed, dyspnœic, giddy, and his face swollen. He was put to bed, pulse 90, temperature normal. With extreme rapidity giant urticarial wheals appeared all over the body. By 5 p.m. the skin condition had disappeared and dyspnœa was the only symptom that remained.

On the 10th all the superficial lymphatic glands were swollen and the temperature rose to 101·2° F. The left axillary glands were the most troublesome.

On the 12th there was anorexia and malaise. At the site of the injection there appeared three urticarial wheals, which in 3 hours became general. The temperature was still raised. In the afternoon the urticaria lessened, but the patient vomited several times. Immediately after vomitting the pulse was 130, temperature 95° F.

On the 14th patient had another attack of urticaria, mostly on the abdomen. This attack was associated with more itching than the others. He had pain on the chest, the eyelids became swollen and he developed a conjunctivitis. During the evening he had repeated attacks of diarrhœa. Patient's subsequent history is uneventful.

During the progress of the attack it was noted that the thyroid gland was enlarged, and that the swelling diminished with the subsidence of the swollen lymphatic glands.

During the past few years the phenomenon of anaphylaxis has been shown definitely to include hay fever, many cases of spasmodic asthma, and urticaria; and also to be a factor in many cases of eczema. As time goes on its importance in the explanation of many other conditions will doubtless become apparent. Anaphylactic phenomena, such as described in the present case, are not very uncommon, but true anaphylactic shock in man is very rare, and the number of deaths recorded from it is extremely small It is possible,. however, that during the war, when there was every chance of its occurrence, many cases were missed, it being thought that the man had died from shock due to his wounds, or from associated "gassing."

A distinction has been made between "serum sickness" and "serum shock" or true anaphylactic shock. It seems extremely probable that no real difference exists and that there is an essential unity between the two conditions. Anaphylactic shock may come on within a few minutes of the injection or, as in the case reported by Dr. J. Fawcett and Dr. J. A. Ryle in the *Lancet* for February 17th, as late as the eighth day. Serum sickness similarly may come on within a few hours or be delayed as late as the 18th day. Still further it seems that the two conditions may be combined, as possibly in the present case.

Dr. E. W. Goodall, in a letter to the *Lancet* for March 3rd, thinks it probable that "if a person undergoes an attack of ordinary serum sickness after a primary injection of serum he is more likely to have an anaphylactic attack after a second injection than is a person who did not suffer from serum sickness after the first injection." My own experience of these cases leads me to believe that this view is the correct one.

Anaphylaxis should specially be guarded against—

1. When there is a history of a previous injection of serum.
2. When there is any susceptibility to the presence of horses.

3. When there is any history of asthma in the family.
4. Possibly when there is any evidence of overaction of the thyroid gland.

The patient may be desensitised by observing the effect of the injection of a small quantity of serum, intravenously or subcutaneously, and then later giving the full dose. Other methods are to dilute the serum with nine times its volume of isotonic salt solution. In the case of dogs the injection of such a diluted solution will result in only slight manifestation, whereas a similar dose undiluted would infallibly cause death. Other salts, such as sodium bicarbonate, 1 gram to 30 or 40 c.c. of water, injected intravenously 15 minutes before injecting the serum will prevent the onset of anaphylaxis. An equal volume of a 5 gr. solution of hyposulphate of soda mixed with the serum will also prevent anaphylaxis. Dried peptone in isotonic solution injected a day or two before the serum is given is also a preventative. For the prevention of the various forms of serum sickness calcium lactate has been recommended, but seems to be useless in preventing the onset or diminishing its severity.

On looking over the record of the present case it will be noticed that there were three distinct eruptions of urticaria—the initial one about $2\frac{1}{2}$ hours after the injection, another on the fifth day, and still another and the most severe on the seventh day. It is interesting, as Dale points out in an article in the *B.M.J.* for January 14th, 1922, that in none of the recorded cases has more than three such eruptions been noted, and that there are three distinct proteins in horse serum—the suggestion being that each manifestation is a specific reaction to each protein.

Another interesting feature is the enlargement of the thyroid gland that was noted with each eruption, suggesting that its internal secretion in some way plays a part in protecting the organism against adulteration of its protoplasm. The good effect of injecting adrenalin in these cases is also suggestive.

An interesting experiment carried out by Mr. P. L. Hickes was to introduce a sensitising dose of horse serum into two guinea pigs of equal weight, and several months later an injection was given subcutaneously, one with horse serum and another with the patient's serum. Within six hours the animal which had been injected with the patient's serum became extremely ill and was unwell for about 24 hours, the control animal showed slight symptoms about 12 hours later and then recovered very rapidly. This solitary experiment for what it is worth would seem to show that the injection of the patient's serum conferred some susceptibility to the guinea pig, hence the more marked anaphylactic reaction.

J. A. B.

Guy's Hospital Clubs' Union.

THE formation of the Clubs' Union, by the amalgamation of the various constituent institutions, took place in the summer of 1891. The objects of the amalgamation were to further the interests of the clubs and societies existing at the Hospital by their mutual support, and to simplify the collection of subscriptions. By the payment of an annual subscription (see Clubs' Union Year Book) to the Clubs' Union, any student of the Hospital can obtain the privilege of membership of the constituent institutions.

The Union comprises the following Constituent Institutions:—Association Football Club, Athletic Club, Boat Club, Cricket Club, Debating Society, Dental Society, Gazette, Golf Society, Hockey Club, Lawn Tennis Club, Pavy Gymnasium, Physical Society, Rifle Association, Rugby Football Club, Students' Club, and Swimming Club.

On joining the Union a Student is entitled to take part in the activities of any of the above Constituent Institutions. The ground of the Clubs' Union is under the control of the Council, is situated close to Honor Oak Park Station on the London, Brighton and South Coast Railway, and to Crofton Park Station on the South Eastern and Chatham Railway. It is nine acres in extent, and is the headquarters of the Guy's Football, Cricket, Athletic and Lawn Tennis Clubs. A Fives Court, under the management of the Students' Club, is situated behind the Nurses' Home near the Swimming Bath, and arrangements are made for classes in boxing, fencing and gymnastics in the Pavy Gymnasium. The Boat Club is affiliated to the London Rowing Club at Putney, and members are entitled to all the advantages of that Club. Meetings of the Debating, Dental, and Physical Societies are held from time to time in the College.

The membership subscription of the Union has recently been raised to five guineas. In spite of the large increase in the number of members, a rise in the subscription rate (perhaps only a temporary one) was necessitated by the rise in the cost of labour and material.

Extensive alterations have been carried out in the Students' Club to provide greater accommodation and comfort for the members, and are dealt with in a separate paragraph on the Students' Club.

At Honor Oak Park a new Stand has been erected to seat 800 people, so that now with the two existing small stands there is seating accommodation for 1,000 people. It is hoped that improvements to the Pavilion will be commenced shortly.

As any student can see, these alterations in themselves necessitate an increase in the membership subscription. The Utopian ideal of a new Students' Club may even yet be realised in the future, thus adding another burden to the finances of the Union.

Membership cards are issued entitling the holders to the privileges of membership of each of the Constituent Institutions.

New members should consult the notice boards in the Colonnade for information as to the activities of the various Clubs.

An excellent programme of home matches has been arranged by the Rugby Football Club (*vide* Fixture Cards), and it should be noted that free admission to the ground during matches at Honor Oak Park is granted only to members of the Union on production of their membership cards.

STUDENTS' CLUB.

The premises of the Club include the Smoking and Reading Rooms and the Dining Hall, in the College.

All three rooms have recently been redecorated, and, in addition, alterations have been carried out in the Dining Hall and the Smoking Room. It is hoped in this way not only to increase the accommodation, but also to expedite the service during meal times.

In the Reading Room the periodical cases have been renovated and the paper stands have been brought up from the Smoking Room, where they used to be in a state of decay.

A good supply of papers and periodicals is now maintained, and it is hoped that all members of the Club will assist the Committee by themselves seeing that the periodicals, etc., are kept in good order. The taking of periodicals out of these cases or the removal of papers from the Reading Room throws a lot of extra work on to the Librarian, and members ought not to expect the Committee to keep up a constant supply of papers if these are continually removed as soon as they are placed in the Reading Room.

The Library in the Reading Room has also been thoroughly re-arranged. A new catalogue has been made, and can be inspected at any time.

Notices are posted in the Reading Room stating the regulations of the Library, and students should avail themselves of this opportunity of a good supply of general literature which for once has no connection whatever with medicine.

Through the Library, books may also be obtained from Mudie's Library.

The attention of all members is drawn to Rule 20 of the Clubs' Union:—

"Every member whose subscription is more than one month in arrear shall be suspended from the privileges of membership, and his name shall be posted in the Students' Club. After two months' default he shall cease to be a member of the Union, and shall not be re-admitted without the consent of the Council, who shall, if they think fit, impose a fine of five shillings upon his re-admission."

A list will shortly be posted in the Students' Club of members who have failed to comply with the rules, and the Secretaries of Constituent Institutions will be notified that the members named are not entitled to the privileges of the Union until their subscriptions have been paid.

N. L. LLOYD,
Hon. Sec., Clubs' Union.

Lectures—Winter Term, 1923.

Medical Pathology.—Dr. Ryle (Museum), Tuesday, 12 noon; Friday, 4.30. First Lecture Tuesday, October 9th, at 12 noon.

Surgical Pathology.—Mr. Davies-Colley (Museum), —Monday, 12 noon; Wednesday, 4.45. First Class, Monday, October 8th, at 12 noon.

Ophthalmology.—Mr. Ormond (Anatomy Theatre), Tuesday, 4.15 p.m. Commencing Tuesday, October 9th

Forensic Medicine.—Mr. Ryffel (Class Room III), Thursday, 4.30. First Lecture, Thursday, October 11th.

Anatomy.—Prof. Johnston (Anatomical Theatre), *Elementary,* Monday, 9.30; Wednesday, 11.0. First Lecture, Monday, October 8th, at 9.30 a.m. *Senior,* Tuesdays and Thursdays, 9.30. First Lecture, Tuesday, October 9th.

Physiology.—Prof. Pembrey (see notice board).

Chemistry, Inorganic.—Prof. Gibson (Chemistry Theatre), Lecture, M.B. and Conjoint Students, Tuesdays and Thursdays, 9.30 a.m. Practical, M.B. Students, Mondays and Tuesdays, 2—5 p.m. Practical, Conjoint Students, Thursday, 2—5; Saturday, 9.30—12.30. *Organic Chemistry,* M.B. Students, Lectures, Wednesdays and Fridays, 10—11; Practical, Mondays and Thursdays, 10—1.

Physics.—Mr. G. Stead, Lectures, M.B. and Conjoint Students, Tuesdays and Thursdays, 10.45 a.m. Practical, M.B., Thursdays and Fridays, 2—5. Practical, Conjoints, Monday, 10—1. Practical, Dentals, Monday 2—5.

Biology.—Mr. T. J. Evans (Anatomical Theatre), Lectures, M.B. and Conjoint Students, Wednesdays, and Fridays, 9.30. Practical, M.B. Students, Wednesdays, Fridays, and Saturdays, 11—1. Practical, Conjoint Students, Tuesdays and Fridays, 2—4.

Other Lectures and Classes, see Notice Board.

Pupils' Physical Society.

RE-FOUNDED IN 1830.

Hon. President.

SIR CHARTERS SYMONDS, K.B.E., C.B., C.M.G., M.S.

Hon. Vice-Presidents.

SIR WILLIAM HALE-WHITE, K.B.E., M.D.
LAURISTON E. SHAW, M.D.
SIR W. ARBUTHNOT LANE, BART., C.B., M.S.
JOHN FAWCETT, M.D.

Hon. Secretaries.

J. M. H. CAMPBELL, M.D.
W. H. OGILVIE, M.Ch.

Presidents.

J. A. CURRIE.	N. L. ECKHOFF.
R. HALE-WHITE.	G. T. HENDERSON.
M. JACKSON.	L. G. HOUSDEN.
N. L. LLOYD.	G. C. MILLIS.
E. R. BOLAND.	M. MITMAN.
W. H. CRAIB.	W. R. SPURRELL.

The attendance during the last session showed that the keenness of the members is gradually regaining the pre-war standard. There is still room for improvement, and it is hoped that the programme for the next Session will raise the enthusiasm of the ward students. It has proved rather difficult to get men to show cases and specimens, but it is hoped that in the future dressers and ward clerks having interesting cases will bring them forward on their own.

Two meetings of the Society will be held in the afternoon instead of at 8 p.m. as usual so that men may attend more easily. These are the Inaugural Meeting, when Sir Arbuthnot Lane will read a paper on "The Future," at 5 p.m., and a Special Meeting, when Sir Bernard Spilsbury, of St. Bartholomew's, will read a paper on some subject of Medico-Legal interest, also at 5 p.m. It is specially hoped that men not in the wards will attend these two meetings and the joint meeting with the Physiological Society.

Last Session the combined Physical and Physiological meeting was a great success, and another fixture has been arranged with the Physical Society of St. Thomas's Hospital, the first to be held at St. Thomas's and the second at Guy's; they will be combined Clinical and Pathological Meetings.

The Society is fortunate in its President and Hon. Vice-Presidents, and in the keen interest they take in its meetings.

The Treasurer's Prize of £5 was awarded to Mr. E. R. Boland.

The Society's Prize of £10 for the best paper read during the Session was won by Mr. E. R. Boland, with an excellent paper which was printed in the GAZETTE on "The Psychology of the Tuberculous." Mr. W. H. Craib was awarded the Society's Prize of £5 for the member who distinguished himself most in the discussions, and the £5 prize for showing the best Pathological specimens was won by Mr. N. L. Eckhoff for a very carefully dissected specimen of an interesting abnormality.

The subject for the Treasurer's Prize Essay, 1923—24, will be a paper dealing with any original work done in the Hospital during the year.

Unfortunately very few entries have been received for the Treasurer's Prize Essay since the war. In the hopes of attracting more entries, the above subject was chosen with the warm approval of the Treasurer by the Committee of the Physical Society, and the choice was confirmed by a General Meeting of the Society. Under these conditions it is hoped that there will be a very large entry.

PROGRAMME FOR 1923—24.

Unfortunately the full programme has not yet been arranged, but the following dates are fixed. The programme will be ready for distribution at the Inaugural Meeting.

1923.

Oct. 18.—Thursday, Inaugural Meeting, at 5.0 p.m. Address by Sir Arbuthnot Lane, Bart., C.B., M.S.
President—Sir William Hale-White, K.B.E., M.D.

Nov. 29.—Thursday, Joint Meeting with the Physical and Medical Society of St. Thomas's Hospital at 8.0 p.m. at St. Thomas's.

1924.

Jan. 24.—Thursday, Joint Meeting with the Physical and Medical Society of St. Thomas's Hospital at 8.0 p.m. at Guy's.

Feb. 21st.—Thursday, at 5.0 p.m. Paper by Sir Bernard Spilsbury, M.D.

THE TREASURER'S PRIZE.

A Prize of £5 is offered each year by the Treasurer.

CONDITIONS.

1. The Prize is open to every member of the Society, except qualified men of more than two years' standing at the date of the reading of the paper.

2. The papers must be delivered to the Honorary Secretaries by the 28th February, 1924.

3. Each essay must be distinguished by a motto or device, and accompanied by a sealed note, inscribed with the motto or device, and containing the author's name.

4. The essays of the unsuccessful candidates will be returned on application to the Librarian, with the notes that accompany them unopened.

5. The Prize Essay will be read and discussed at the last meeting of the Society.

The subject for each year will be announced at the beginning of the Winter Session.

THE SOCIETY'S PRIZES.

A prize to the value of £10 will be awarded for the best paper read before the Society during the Session; a prize to the value of £5 will be given to the member who distinguishes himself most in the discussions; and a prize to the value of £5 will be given to the member who exhibits the best specimens of scientific interest during the session.

CONDITIONS.

1. No member shall obtain the same prize on two occasions.

2. The judges have the power of dividing the prizes should two of the candidates possess equal merit, or of withholding them should insufficient merit be displayed.

3. Two prizes may not be awarded to the same candidate.

EXHIBITS.

Any members who possess objects of general (not necessarily pathological) interest are requested to communicate with one of the Secretaries, so that these may be shown after the reading of the papers.

Reviews.

Abdominal Surgery for Nurses. By Harold Burrows. (The Scientific Press.) Price 4s. net.

This is a really excellent little book. Abdominal conditions, causes and treatment are explained fully, but simply, and important nursing points are well emphasised.

Several details, which are apt to be overlooked, have been dealt with very efficiently, e.g., pages 21—22 on pulse estimation. The section on "Shock" is especially good, as also are the various diagrams which are clear and well defined. Nurses who add this book to their collection will find it most useful and helpful.

Urgent Surgery. By Felix Lejars. (Messrs. John Wright & Sons, Ltd., Bristol). Price 63s. net.

A volume that is a third English edition, translated from the eighth French edition, may be taken as having already proved its value to the surgical world. Originally published in 1899, the author writes in his preface, "This book has cost me much time and trouble. I have written it slowly, and I might say that I have lived it before writing it." An excursion into the text of the volume makes this infinitely clear. The detailed descriptions of signs and symptoms, the operative technique, and above all, the pitfalls and unexpected conditions discovered during the operations reveal the experiences of a life-long practical study of the subject. In parts these abnormalities are so varied and discussed at such length that the young surgeon would probably find himself less confident of a successful performance of the operation after studying this book than he was in his previous state of comparative blissful ignorance.

Urgent surgery does not mean merely the surgery of injuries, but the treatment of the ever-increasing number of clinical conditions demanding immediate surgical action. Every practitioner cannot be in a position to carry out an urgent operation, but the author maintains rightly that everyone should be in a position to recognise at once the necessity of urgent surgical interference in those cases, which experience has shown to be unamenable to other forms of treatment. Throughout the volume hard and fast rules are laid down. For instance, "Every strangulated hernia ought to be operated on at once." The methodical application of taxis is described, but this is only for use in special cases, as when the patient is very old and perhaps cachectic, or the strangulation is only a few hours old and the patient is strongly adverse to operation. The whole principle of the book is that operative interference should be immediate, and the chief object of its teaching is the recognition of cases demanding such intervention.

Clearly printed and abundantly illustrated, the volume is invaluable.

A Manual of Human Anatomy for Dental Students. By R. Bramble Green, F.R.C.S.Eng. (Messrs. Benn Brothers, Ltd., London.) Price 18s. net.

This new volume is described as the first text-book of Anatomy designed for the dental student and, as such, naturally deals chiefly with the anatomy of the head and neck. A book of two-hundred and fifty pages, it is divided into two equal parts, the first dealing with general anatomy in a very condensed form, the second with the regional anatomy of the head and neck. This second part contains 10 coloured plates, which are rendered exceedingly clear by the omission of all unnecessary detail—unnecessary, that is, for dental students working for a pass examination in anatomy—and altogether fulfils quite admirably the purposes for which it was written. The first part is, from its nature, less satisfactory. Admitting that the student does not require a detailed knowledge of general anatomy, it yet does not seem certain that he will gain any useful knowledge from parts of this very concentrated treatise. The motor and sensory paths, for instance, will leave him entirely befogged if he tackles them without previous knowledge of their course. But these instances are far outweighed by the general usefulness of the book, which will be found to be in most respects quite adequate. The type is very clear, and there are sixty-seven illustrations.

Hygiene and Public Health. By Louis Parkes, M.D., and Henry R. Kenwood, C.M.G., M.B. Seventh edition. (Messrs. H. K. Lewis & Co., Ltd.) Price 20s. net.

This seventh edition of a well-known book has been thoroughly revised and amplified, much new matter having been introduced without any increase in the size of the volume, by the omission of the chapter devoted to Sanitary Law and Administration.

The authors are of opinion that this subject cannot now be adequately treated in a single chapter, and so have omitted it altogether. Rather more than a quarter of the entire book is devoted to Infection and the communicable diseases, this chapter being the most useful for the general practitioner, while the subject of school hygiene is treated in an able and interesting manner.

As a text-book for use in preparing for the ordinary pass examinations in medicine, the volume is much too large, but by students preparing for the Diploma in Public Health, it will be found of great value, while the appearance of its seventh edition proclaims its general excellence.

Hodgkin's Disease. By R. Allan Bennett, M.D., M.R.C.P. (Messrs. John Wright & Sons, Ltd., Bristol.) Price 2s. net.

This small book treats in fifty-six pages of the definition, symptoms, pathology, diagnosis, etiology, and treatment of Hodgkin's disease. So much confusion exists as to the exact nature of this condition, even as to its definition, that the author is unable to make definite statements under any of his six headings. He has, however, mentioned throughout the chief theories with many of the observers and their facts supporting each. Better still, he has, at the end of each chapter, given his own views on the subject and his reasons for holding them. Altogether a very interesting and able summary of the modern views on this disease.

Rugby Football.

The question "what are the prospects of the XV. for the coming season?" invariably asked of the Secretary at this time of the year, is a difficult one to answer, even when one has the form shown in early trial and practice games to guide one. Owing to the state of the ground these games have been impossible, so that the task of foretelling the future becomes more difficult.

Of last season's XV. P. K. Albertijn, W. H. Taylor and G. Zondagh have left. E. L. Sprong, who, owing to ill-health, did not play in the Cup Final has also left.

Of the successful Cup Final XV. there remain the full back, S. R. Trick, three three-quarters, G. Steyn, G. R. Mostert, and J. W. Finnemore. J. G. Van Schalkwijk, this season's captain, remains at stand-off half, and F. Bekker, though out of his year for Cup matches, intends to turn out for the Hospital despite all rumours to the contrary. Among the forwards, W. D. Doherty, E. E. Nesor, this season's vice-captain, E. H. Fouraker, N. M. Holloway, B. G. Scholefield and G. G. Cameron remain. It is unlikely that Doherty will play much this season, as he intends to give up serious football. That he may change his mind is the great wish of all interested in Hospital Rugby. Unlike Bekker he is not yet out of his year. With several good forwards in the running there should be little difficulty in filling the last two or three places in the pack.

The usual rumours are prevalent that several first-class players are on the way over from South Africa, coming up from the Public Schools, or arriving from the 'Varsities. No reliance can be placed on them until the trial games have proved them true. The estimate of the season's prospects must be based on facts as they are at present. What are these? We have lost in Albertijn a brilliant three-quarter, but we have in Graham-Davies, who has already been "capped" for Wales, a very sound one to take his place. Bekker can play in all except Cup Matches, so there is little reason why we should not be as good behind the scrum this season as last. Forward we have no one quite in the same class to replace W. H. Taylor or W. D. Doherty should he adhere to his resolve not to play again, but there are several men who played in the pack last season to choose from. Much depends on our ability to build up a good pack. With plenty of scrum practice we can do it, without we shall not, and on this fact, I think, turns the whole question of success in the coming season.

It will be seen from the fixture list appended that we meet all our old opponents, so that the task in front of the team is a heavy one.

By the time this is published the first match will have been played, and if this forecast is correct should have been won comfortably.

FIRST TEAM.

			Ground.
Sept.	22	Catford Bridge	A
,,	29	Coventry	A
Oct.	6	United Services...	A
,,	13	Gloucester	A
,,	20	Bristol	H
,,	27	Harlequins	A
Nov.	3	Old Blues	H
,,	7	Cambridge University...	H
,,	10	Coventry	H
,,	17	London Scottish	H
,,	24	London Welsh	A
Dec.	1	Blackheath	A
,,	8	Cardiff	A
,,	15	Aberavon	A
,,	29	Old Alleynians	H
Jan.	5	O.M.T.	H
,,	9	R.A.F.	H
,,	12	Bristol	A
,,	19	Birkenhead Park	H
,,	26	Gloucester	H

Jan.	30	Cambridge University	A
Feb.	2	Old Leysians	A
,,	9	Devonport Services	H
,,	16	United Services	H
,,	23	Plymouth Albion	A
Mar.	1	Birkenhead Park	A
,,	29	Swansea	A

H. KEITH-WILLIAMS.

GUY'S v. CATFORD BRIDGE.

At Bellingham, on Saturday, September 22nd, 1923, the Hospital commenced its 80th Season. There has been a good deal written lately about it, but one may as well rub it in. Dr. R. H. M. Randell has our 40th season card, dated 1883—84. He was captain that year, so there you are, enough said. Dr. Randell's card is our birth certificate; if anybody is older let them produce theirs.

We are always pleased to meet Catford, but why always at Catford; here is our splendid ground at Honor Oak Park and its grand stand specially built for home matches all ready, and yet we always go to Catford. It is like furnishing a comfortable home and going elsewhere to live.

It is always a little difficult to write about a first match, because the team is new and the training short. It is fair to add that most did admirably, though one fears Fellowes-Smith is not exactly a born full-back. One liked much the show of Tregarthen; the energy of Du Toit and Brayfield caught the eye. No need to mention Neser and Holloway; their laurels are already won. C. L. Steyn got well away for his first try; valiantly Bartlett and Baker chased him, one might as well chase the wind. Fitting it was that the famous try-getter should open our season. A little later Graham-Davies gained a beautiful try, drawing the opposition cleverly to Finnemore he swerved inwards past three opponents, at great pace, as one put it "in full sail with every stitch of canvas drawing." Van Schalkwijk converted. Mostert and Steyn had some tumbling work upon the left, and then the ball came bounding to Neser in the centre who promptly dashed over. Steyn converted this one.

There was no concerted attack opposed to us, no stiff defence, no pace to compare with our backs, but plenty of pluck and determination; often, however, this was useless against the lightning attacks of Van Schalkwijk and his merry men. Meissner—one congratulates him; he follwe a great man; let not the former's greatness weigh on Meissner; it is unfair to expect too much, and the follower of such as Bekker must not suffer by thoughtless comparison. Graham-Davies' re-appearance was welcome and successful. Finnemore, Steyn, Mostert scored in turn. Once Neser majorised; then from beyond the half-way mark Van Schalkwijk received a pass. He darted off, electrified apparently himself, and petrifying the opposition, he went through like a corkscrew and at amazing speed, passing Bartlett with a swerve that left the full-back standing; he planted beneath the upright almost before lost breath was regained. Van Schalkwijk's effort was converted. The Guy's captain had marked his year of office with a try to be remembered. Score—Guy's (4 goals 3 tries) 29 points; Catford nil.

Guy's Team.—G. Fellowes-Smith, J. H. Finnemore, H. Graham-Davies, C. L. Steyn, G. R. Mostert, S. H. Meissner, J. G. Van Schalkwijk, (captain), E. E. Neser, N. M. Holloway, G. G. T. Tregarthen, P. J. Du Toit, N. L. Eckhoff, L. J. Brayfield, E. W. Hutchinson, H. de Wet Vorster.

The Hares and Hounds.

On Wednesday, October 10th, the United Hospitals' Hares and Hounds will hold their first run of the season from "The Bull's Head," Chislehurst. The words "Hares and Hounds" calls up visions of cross-country giants, careering over the country with a supreme contempt for obstacles at an average speed of ten miles an hour. This is not that sort of club. It is a club of nature lovers, who take a keen delight upon every possible occasion of leaning against a gate and drinking in the scenery. Later, the "Bull" provides good substitutes for the scenery, but that is after the run. To enjoy these afternoons there is no occasion to be fleet of foot. True, there are some who start last, get back first, and seem to enjoy it, but those who have studied the recent work on athletes' heart, know better than to do this; they plod cheerfully along in football boots, and derive both pleasure and benefit from the mild exercise. The fare is cheap, the tea is cheap, the baths are hot and the shower is cold, but then the shower is in a little room apart, and if one comes from it working the towel vigorously and blowing hard, who is to know that it is merely make-belief? All who wish to enjoy themselves without being strenuous should watch the athletic notice board for the time of the Wednesday trains, and once they have tasted the delights of the cold nip of the autumn air, and the "old nips" of the "Bull's Head," their Wednesday afternoons will be booked for the rest of the season.

Change of Address.

H. Millett, M.R.C.S., L.R.C.P., 3, Portland Place, W.1. (Telephone, Mayfair 5782).

J. F. H. Stallman, 125, Harley Street, W.1, (Telephone, Langham 1514); after 6.0 p.m. Streatham 3673.

Golden Wedding.

On September 17th, 1873, in the choir of Saint Saviour's, Southwark [Southwark Cathedral], by the Rev. Samuel Benson, M.A., Chaplain, assisted by the Rev. Daniel Moullin, B.A., Rector of Holy Trinity, Trinity Square, S.E., Jane Maria, second daughter of the late William Wood, M.R.C.S.Eng., L.S.A.Lond., of Trinity Square, S.E., to Frederick George Larkin, F.R.C.S.Eng., L.R.C.P., L.M.Edin., of Trinity Square, S.E., and Grove Park, Kent, youngest son of the late Richard Larkin, of Maypole, Hoath, near Canterbury.

Appointment.

Dr. A. Douglas Crofts has been appointed a member of the Eton College Medical Board.

Guy's Hospital.

TIME TABLE FOR OUT-PATIENT AND IN-PATIENT ATTENDANCES OF MEDICAL AND SURGICAL UNITS AND OF OUT-PATIENT ATTENDANCES IN THE SPECIAL DEPARTMENTS.

	A.M. Medical Wards and Out-Patients.	P.M. Medical Wards and Out-Patients.	P.M. Surgical Wards & Theatres. T. = Special Teaching Rounds.
MONDAY	Dr. Hurst (Wards) Dr. Barber (Wards—Skins 10 a.m.) Mr. Mollison (Wards and Ops. 10 a.m.) Dr. Mutch (Medical O.Ps.) Mr. Hughes (Surgical O.Ps.) Dr. Cameron (Children O.Ps.)	Dr. Beddard } (Wards). Dr. French } Mr. Eason (Wards & Ops. 2 p.m.) Mr. B. Smith (Wards & Ops. 2 p.m.) Mr. Chapple (Gy. O.Ps.) Mr. Ormond (Eye O.Ps.) Mr. Layton (Thr. O.Ps.) Mr. Trethowan (Orth. O.Ps.)	T. Mr. STEWARD. Mr. Fagge. Mr. Davies-Colley. Mr. Rowlands. Mr. Bromley.
TUESDAY	Mr. Thompson (Wards and Ops.) Dr. Cameron (Children's Ward (T) 11 a.m.) Dr. Hunt (Medical O.Ps.) Mr. Bromley (Surgical O.Ps.)	Dr. Fawcett } (Wards). Dr. Beddard } Mr. Ormond (Wards & Ops. 2 p.m.) Mr. Chapple (Wards (T) & Ops. 2 15 p.m.) Mr. Layton (Ops. 1.30 p.m.) Dr. Barber (Skins O.Ps.) Mr. Eason (Eye O.Ps.) Mr. Mollison (Thr. O.Ps.) Dr. Marshall (Tub. O.Ps.) *Mr. Slesinger (Fractures O.Ps.) *Dr. Eyre (Vaccine O.Ps.) Mr. Thompson (G.U.O.Ps.)	T. Mr. ROWLANDS. Sir Alfred Fripp. Mr. Turner. Mr. Steward. Mr. Hughes.
WEDNESDAY	Dr. Hunt (Wards) Dr. Cameron (Children O.Ps.) Dr. Marshall (Medical O.Ps.) Mr. Slesinger (Surgical O.Ps.) Drs. Symonds & Craig (Neur.-Psych. O.Ps.)	Mr. Trethowan (Orth. O.Ps.) Miss Rawlins (V.O.Ps.)	
THURSDAY	Dr. Hurst (Wards) Mr. Mollison (Wards and Ops. 10 a.m.) Dr. Ryle (Medical O.Ps.) Mr. Turner (Surgical O.Ps.) Dr. Barber (Skins O.Ps.)	Dr. Fawcett } (Wards). Dr. French } Mr. Eason (Wards & Ops. 2 p.m.) Dr. Cameron (Children Ward 2 p.m.) Mr. B. Smith (Gy. O.Ps.) Mr. Ormond (Eye O.Ps.) Mr. Layton (Thr. O.Ps.)	T. Sir ALFRED FRIPP. Mr. Fagge. Mr. Davies-Colley. Mr. Rowlands. Mr. Bromley.
FRIDAY	Mr. Thompson (Wards and Ops.) Mr. B. Smith (Wards and Ops. 10 a.m.) Dr. Barber (Wards—Skins 10 a.m.) Dr. Poulton (Medical O.Ps.) Mr. Davies-Colley (Surgical O.Ps.) Dr. Cameron (Children O.Ps.)	Dr. French } (Wards). Dr. Fawcett } Mr. Ormond (Wards & Ops. 2 p.m.) Mr. Eason (Eye O.Ps.) Mr. Mollison (Thr. O.Ps.) *Mr. Trethowan (Orth. O.Ps.) *Prof. Eyre (Vaccine O.Ps.) Dr. Marshall (Tub. O.Ps.) Mr. Thompson (G.U.O.Ps.)	T. Mr. FAGGE. Sir Alfred Fripp. Mr. Turner. Mr. Steward. Mr. Hughes.
SATURDAY	Dr. Marshall (Medical O.Ps.) Mr. Slesinger (Surgical O.Ps.) Dr. Symonds (Neur. O.Ps.)		

* = For reference only.

TIME TABLE FOR ATTENDANCE OF PATIENTS IN THE OUT-PATIENT DEPARTMENT.

N.B.—NEW patients should not be sent to those departments marked with an asterisk.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
MEDICAL 9 a.m.	Dr. Mutch	Dr. Hunt	Dr. Marshall	Dr. Ryle	Dr. Poulton	Dr. Marshall
SURGICAL 9 a.m.	Mr. Hughes	Mr. Bromley	Mr. Slesinger	Mr. Turner	Mr. Davies-Collley	Mr. Slesinger
CHILDREN 9 a.m.	Dr. Cameron	—	Dr. Cameron	—	Dr. Cameron	—
SKINS	—	Dr. Barber Children before 10 a.m. Adults, 11.30	—	Dr. Barber 9 a.m.	—	—
*FRACTURES 1.30 p.m.	—	Mr. Slesinger	—	—	—	—
*T. B. DEPT.	—	Dr. Marshall 11.30 a.m.	Dr. Marshall 5 p.m.	—	Dr. Marshall 11.30 a.m.	—
*VACCINES, ETC.	—	Dr. Eyre 11.30 a.m.	—	—	Dr. Eyre 11.30 a.m.	—
ORTHOPÆDICS 11.30 a.m.	Mr. Trethowan	—	Mr. Trethowan	—	*Plasters only 1.30 p.m.	—
GYNÆCOLOGY 11.30 a.m.	Mr. Chapple	—	—	Mr. Bellingham Smith	—	—
NERVOUS DISEASES 9 a.m.	—	—	Dr. Symonds	—	—	Dr. Symonds
EYES 11.30 a.m.	Mr. Ormond	Mr. Eason	—	Mr. Ormond	Mr. Eason	—
EAR, NOSE and THROATS	Mr. Layton 11.30 a.m.	Mr. Mollison 11.30 a.m.	—	Mr. Layton 11.30 a.m.	Mr. Mollison 11 a.m.	—
GENITO-URINARY 11.30 a.m.	—	Mr. Thompson	—	—	Mr. Thompson	—
V.D. F.	*Miss Rawlins 5.0 p.m.	—	Mr. McNair 5.0 p.m. Miss Rawlins 11.30 a.m.	—	*Miss Rawlins 5.0 p.m.	—
V.D. M.	Mr. Dowling Mr. Lloyd	—	Mr. Dowling Mr. Lloyd	—	Mr. Dowling Mr. Lloyd	—

DENTAL.—Daily at 9.0. a.m. Children, Tuesday and Thursday at 9.0. a.m.

Fencing.

On Monday next, October 1st, Captain Felix Gravé, most finished and able of all professors of fencing, will hold the first meeting of the season in the Pavy Gymnasium. From four o'clock onwards the College quadrangle will resound with the clashing of steel; doublets will be pinked and trunks slit. It is hoped that all who are at all interested in this form of exercise will be present to support the common cause. If you have only just arrived at the Hospital and ha venever played with a foil in your life, we shall be pleased to see you. If you have been reared in the art of fence and can skewer your adversary with one arm while embracing your mistress with the other, we shall welcome you heroically.

Encounters have already been arranged with Oxford University, the Honourable Artillery Company, and Harrow School. Our sword strength has not yet reached double figures. Whoever you are, if you will take a reasonable interest in the work, you can gain a place in the team to meet Oxford in December—our first match. Do not think that if you have never fenced, you never will, for assuredly if you never do, you won't.

At four o'clock on Monday in the Gymnasium we shall expect you. Come as you are; everything is provided, and W. H. Foy and L. G. Housden are always at your service to enlarge on the joys and sorrows of the Guy's Hospital Fencing Club.

The Sciences.

BIOLOGY.

The Biology course is primarily intended to be the students' introduction to the science of medicine, and must be regarded as the study of living things in many forms and from various aspects rather than the accumulation of facts about a number of plants and animals. In other words, it is intended as a training in the acquisition of a point of view rather than a stock of facts. Incidentally, also, the student learns a language which is largely his means of expression afterwards. The practice of the Biological Laboratory should give him a facility in the use of scalpel and scissors and a knowledge of methods of preparation and staining of tissues which are the arts of the Dissecting Room and the Histological Laboratory. Lastly, a thorough acquaintance with the vertebrate types should be a great help to him in obtaining an intelligent knowledge of human anatomy.

Cases of instruments are placed on view which include all those afterwards required in the Dissecting Room. A microscope is needed from the beginning, and the student is warned against buying an instrument which will be a handicap to him throughout his career. The difference in price between a good and a bad instrument is only a few pounds. All second-hand microscopes should be submitted to the Demonstrators for inspection and examination of lenses before the purchase is completed.

CHEMISTRY AND PHYSICS.

The student is often tempted to regard the study of Chemistry and Physics as one of very little use when once his preliminary examination is passed; but he will find in his study of the sciences of Physiology, Pharmacology and Pathology that a proper understanding of Chemistry and Physics is invaluable and essential. That this is so, is now fully recognised in the London University curriculum, which should be carefully studied by every London student.

The matriculated student will, in his first year, study Inorganic Chemistry, Physics, and General Biology, and at the end of this period, provided he has worked diligently in the laboratories, and attended the lectures and revision classes regularly, should have no difficulty in passing the First Examination for Medical Degrees. In his second year he will study Organic and Applied Chemistry, together with Anatomy and Physiology, and at the end of the second winter, provided, as before, that he has worked steadily from the commencement, should have little difficulty in passing the First Part of the Second Examination for Medical Degrees. Anatomy, Physiology, and Pharmacology are then taken as the Second Part of this Examination, at the close of the third winter, prior to commencing clinical work in the wards.

From the Conjoint and the Dental student only six months' work is required. but those entering without previous knowledge of Chemistry and Physics will find that time hardly sufficient, and are usually advised to take the full "year" of three terms, or nine months.

The importance of practical work cannot be too greatly emphasised, and lectures and books can but supplement work done in the laboratory. Guy's men have no excuse for neglecting laboratory work. The Chemical Laboratory, for example, is open from 9 a.m. to 5 p.m. from Monday to Friday, and from 9 to 1 on Saturday, and students are strongly urged to form early the habit of spending their spare hours, apart from those officially allotted, in one or other of the laboratories. Reading should be left for the evening. After a day in the laboratory, reading a good text-book will be found to give ample scope for thought. "Cramming," or the memorising of words and phrases, without a knowledge of the corresponding realities, is one of the worst intellectual habits a student can acquire, and in the long run invariably leads to failure.

ANATOMY.

The primary object of dissecting is to render oneself familiar with the structures of human anatomy and their relationships one to another. A good knowledge of human anatomy is essential to the medical student, owing to the great scope for application of this knowledge which is provided by medicine and surgery, and it is no exaggeration to say that the better a man knows his anatomy, the more likely is he to succeed in these subjects. By handling and tracing the structures exposed in dissections, the student is enabled to form mental pictures which greatly exceed in value the plates and diagrams to be found in books, and it cannot be emphasised too much that the knowledge obtained by dissecting is more thorough, more lasting and more definite than the knowledge obtained from text-books, however good the latter may be.

In addition, dissecting trains the fingers and develops the sense of touch, and that delicate muscle sense which is so necessary to aid the eye in carrying out a delicate manipulation.

The basis of anatomical knowledge is a thorough acquaintance with the bones. These can only be learnt by handling the bone and making out each point on it as the description in the book is being

read. Hence it is very desirable to possess a half skeleton. (This may be had from Mr. Hancock, the Senior Assistant in the Anatomical Department, who will also supply cases of instruments.)

The man who sits in an easy chair with an open Gray upon his knees and no bones by his side is simply wasting his time.

Men who intend to take the Primary Examination for the Fellowship of the Royal College of Surgeons should attend both the course of lectures for senior students in the second winter session (for times, *vide* notices), and also the special class for the Primary Examination.

Books and Instruments.

The student requires a Manual of Practical Anatomy, in which the structures are described as they are exposed in the course of dissection. The best book for this purpose is Cunningham's Practical Anatomy (3 vols., 12/6 each); it should be read before during, and after each day's work.

In addition, a text-book of Human Anatomy, in which the subject is described by systems, is necessary. Gray's or Cunningham's Text-Book are both good.

Men who think that they may want to take the Primary Examination for the Fellowship of the Royal College of Surgeons will require a book dealing with Embryology and Morphology, and they will find that Keith's book on the subject contains all that is essential.

The following instruments are necessary:—Three scalpels, two pairs of *dissecting* forceps, and two sets of "hooks." No other instruments are required.

Dental Students.

The detailed knowledge which is demanded of the medical student is essential for the dental student only as regards the head and neck and the bones of the skull. Special demonstrations are arranged each term suitable to the requirements for the L.D.S. Examination.

PHYSIOLOGY.

Physiology, which forms the basis upon which scientific medicine, surgery and midwifery rest, will require the most earnest attention on the part of the student during the short space of two years which he can devote to it, and he will find that his understanding of the medical, surgical and pathological problems with which he will meet later on varies directly with the thoroughness of his physiological ground work. Some elementary works on the subject, such as Huxley's *Elementary Lessons* in *Physiology*, or the smaller works by B. Moore and by Foster and Shore, should be read in order to obtain a general knowledge of the scope of the subject.

The student should attend the lectures on Physiology (for times, *vide* notices), and also the tutorial classes which are held by the demonstrators. During this time he should read the subject in some text-book such as Starling's *Principles of Human Physiology*, Halliburton's *Handbook of Physiology*, Stewart's *Manual of Physiology*, Howell's *Text-book of Physiology*, or Hill and Flack's *Text-book*. While attending the practical classes held during the winter, the student is advised to read *Practical Physiology* (published by Arnold).

Physiological clinical demonstrations for senior students are held each week.

Candidates for the M.B. of London or other Universities must in addition attend the class in advanced practical physiology held twice a week during the second winter session, and this class should also be attended by men working for the first F.R.C.S. examination.

Those desirous of obtaining a wider knowledge or distinction in the second M.B. examination should supplement the course of reading indicated above with original papers in the *Journal of Physiology*, with parts of Schäfer's *Text-book of Physiology*, *Recent Advances in Physiology and Bio-Chemistry*, edited by L. Hill; *Further Advances in Physiology*, edited by L. Hill; *Principles of General Physiology*, by W. M. Bayliss; and Leathes' *Problems in Animal Metabolism*. Revision classes are held by the Demonstrators during the two months preceding the first F.R.C.S. and the M.B. examinations and should be attended by all candidates.

A special course is held for candidates for the Honours B.Sc. of the University of London.

PATHOLOGY.

When the student has passed the Second Conjoint or M.B. Examination he is about half-way through his medical curriculum, and he should have gained a working knowledge of the functions of the body in health. This knowledge is an essential preliminary to the study of the most important of the medical Sciences, viz., Pathology, or the study of the functions of the body in disease. Throughout his life the student, if he continues to study and practise medicine, must ever keep pathology in the foreground. It is desirable, therefore, that the study of pathology be begun as soon as possible and continued throughout a medical career.

The subject is an exceedingly large one and it is customary to divide it into several sections:—

1. General Pathology.
2. Morbid Anatomy.
3. Morbid Histology.
4. Bacteriology.
5. Chemical Pathology.

Due attention must be paid to each of these branches.

During the first three months' work in the wards the study of pathology is commenced. Three mornings weekly are occupied with lectures on the general principles of Pathology and by practical work in Morbid Histology and Bacteriology. Regular attendance at these classes is most desirable, and the attractions of the Wards and clinical work should not be allowed to interfere with the laboratory studies.

Classes and demonstrations in chemical pathology should be attended during the tenure of the post of Medical Ward Clerk.

It is essential that throughout all ward appointments no opportunity should be missed of continuing the study of pathology. Every man should, as far as is practicable, follow out the pathology of each and every one of his cases. Is a bacteriological investigation made? He should follow it as far as possible. Is a portion of tissue removed for micro-

scopical examination? He should see the section. Is a chemical examination demanded? He should try and see the analysis carried out. He should never miss an autopsy on any one of his cases. He should read up each case as he meets it. Set hours cannot be given for these lines of study, they must be fitted in as time and opportunity permit.

Efforts should be made to see as much practical work and as many demonstrations in pathology as can be arranged. There are very few days when no pathology can be learned. Post-mortems are held nearly every day — Monday, Tuesday, Wednesday, Thursday and Friday at 1.30 p.m., and Saturday at 11.30 a.m. Attendance at these will amply repay the time expended.

Informal classes in pathology are held three times weekly during the October and May terms. These, though primarily intended for M.B. students are suitable for and should be attended by those sitting for Part I. of the M.B. Cantab. and the Final M.B. of Oxford or London University.

During the later clinical appointments certain students may hold a few pathological posts, such as Student Demonstrator, Assistant to the Demonstrators of Morbid Anatomy, Student Assistant in the Bacteriological Department. One or more of these may be held in turn, and they prove exceedingly valuable from the learners point of view.

There are many books which might be recommended, and what suits one man does not prove attractive to another. MacCallum, "Text Book of Pathology"; Pembrey and Ritchie, "General Pathology"; with Muir and Ritchie, "Manual of Bacteriology," should prove an adequate combination for most purposes. Other books which may suit other tastes and which are good are—Adami, "Principles of Pathology"; Adami and Macrae, "Text-book of Pathology"; Green, "Pathology." For morbid histology Grunbaum "Essentials of Morbid Histology" may be recommended.

When the information in these books proves inadequate, as it is sure to do occasionally, some of the articles in Allbutt and Rolleston "System of Medicine" may be consulted, or references to original papers may be obtained from that work, and from the bibliography in MacCallum, "Text-book of Pathology."

BACTERIOLOGY.

Bacteriology, although one of the youngest of the auxiliary sciences, has already made a most profound impression upon the theory and practice of both medicine and surgery, and by providing appropriate and specific treatment for bacterial infections has created the demand for exact as well as accurate diagnosis. Consequently, particular attention is devoted in this class to the technique of the various investigations undertaken in connection with the ward work. The student himself stains sputum, pus, and morbid exudates by various methods to demonstrate the associated bacteria. In addition, he is instructed in the practical work of culture and staining methods, and is encouraged to repeat for himself during the intervals between successive classes any observations and experiments previously carried out, in order that he may be adequately prepared to take advantage of the advanced courses which are available during later years of study, and to equip him for the performance in general practice of those more obvious methods of bacteriological diagnosis, which experience has shown are both reliable and valuable. Demonstrations are also given upon the life history of the various organisms pathogenic to the human race and the changes such organisms undergo or produce when they gain entrance to the human tissues.

Throughout the course considerable stress is laid on the applications of bacteriology to practical diagnosis and treatment, including the use of various remedial agents (serums and vaccines) which have been elaborated in the bacteriological laboratory for the treatment of disease, together with those facts and theories relating to natural and acquired immunity upon which bacteriological therapy is based.

CLINICAL CHEMISTRY.

A class is held in this subject during the period of first three months medical ward clerk, forming part of the course in pathology. Students are recommended to make an early acquaintance with this subject in order that they may carry out investigations of this nature on their own cases, for which purpose accommodation is provided both in the clinical laboratory and in the laboratory of clinical chemistry.

MEDICAL WARDS.

To each medical ward clerk is allotted a certain number of beds, and he is expected to examine, and write full reports on all patients who are admitted into these. Occasionally it so happens that a patient is too ill to be examined except by the house-physician and physician, or that a case dies before the ward clerk has had an opportunity of seeing it. Under these circumstances he should obtain the history, and an account of the symptoms, physical signs, and progress of the case from the house-physician, and should base his report on these data. It cannot be too strongly insisted that a report, however brief, must be written on every case, and it is of the greatest importance that the diagnosis and remarks made by the Physician should be entered at once into the report. Moreover, any errors detected by the Physician or Registrar in the original report should be immediately corrected. In the event of a patient dying the ward clerk must obtain the abstract of the post-mortem findings, and carefully enter it up, and it need hardly be said that all clerks should make every effort to see the post-mortem examination on any case they may have seen during life.

The medical wards are open to clerks from 10 till 12.30 in the morning, and from 1.30 till 6.30 in the evening. The Registrars begin their rounds at 10.30, and by that time a clerk should at least have full notes of the history of any new patient who may have been admitted into one of his beds; and he should have a full report in readiness for the Physician in the afternoon. Ward clerks should realise that they are expected to know the details not only of their own cases, but of every patient under their Physician. It is no excuse to plead ignorance because "this is not my case." If only a clerk will take the trouble to make himself conversant with each case in this way, he will find at the end of his six months that an enormous amount of clinical material has passed through his hands, and he will probably have acquired enough knowledge of medicine to enable him to pass the Conjoint Final with but little additional reading But

so many men waste their time through sheer laziness in the medical wards, never realising that they are throwing away experience which would prove invaluable to them later on.

An hour spent in the wards after tea three or four times a week will give opportunities, not only for going over cases and writing up reports, but also for seeing the house-physician tap chests and abdomens, etc. The treatment, too, which each case is receiving, may well be studied at this time.

With the present shortage of beds, no opportunity of gaining clinical experience should be missed, and many of the most interesting and important medical cases can be seen at Out-Patients. Nothing is more valuable than seeing the new out-patients, writing up their history, examining them and making a diagnosis, before they are seen by the physician.

As regards reading, the best method is to study the text-book account of each disease as one comes across it in the wards or in discussion, and afterwards to compare, if possible, the text-book description with the symptoms and signs presented by the patients. At the same time, the most important medical journals should be read regularly, for by this means only can the student keep himself in touch with modern work. The *B.M.J.* and *The Lancet*, *The Quarterly Journal of Medicine*, as well as the *Journal of the American Medical Association*, are especially recommended.

Books that may be recommended are the following:—The well-known text books by Osler and Dr. Poulton's revised edition of Taylor, "Medical Diagnosis," by Latham and Torrens, and "Auscultation and Percussion," by Gee. For second three months ward clerks the most important monographs in Allbutt's or Osler's "System of Medicine," and Campbell Thomson's "Diseases of the Nervous System," will prove valuable and interesting reading. For laboratory work Hutchinson and Rainey's "Clinical Methods," or Dr. French's book will be useful.

SURGICAL WARDS.

The appointment of Surgical Ward Clerk is held for three months. It is the first, and possibly the best, clinical appointment. The ward clerk has a very definite responsibility, not only in recording the history and progress of his cases for future reference, but also in making observations which may be of vital importance. In this way the knowledge he acquires is the more certainly impressed. Each clerk is attached to a surgical unit, and works in the wards under the direction of the surgeon to whom he is attached and the registrar of the unit.

During this appointment the student attends a course in elementary pathology and pharmacology, and receives a grounding in the principles of disease and treatment. At the same time he cannot be too strongly recommended to take every advantage of his opportunities to gain an insight into that practical work which will stand him in good stead, not only as a surgical dresser, but throughout his professional career. He should make a point of spending all his available time in the Surgery during "take in" week, and of seeing major and minor operations and even dressings whenever possible.

The responsibility of writing careful reports is too obvious to labour; no clerk with a grain of common sense will regard a surgical report merely as an educational exercise for his own benefit.

Two further periods of three months are devoted to the appointments of Surgical Dresser. The work of a dresser is perhaps of more importance at Guy's than at any other hospital, and the advantages to be gained are correspondingly greater. A dresser has only to realise this to prove himself worthy of the trust and reap the benefits.

The most junior clinical student has a definite status in the wards, and he will find his opinion as an anatomist or physiologist treated with the greatest respect. That he should occasionally be called upon to do some of the "dirty work" is inevitable; but no reflection is cast thereby on his standing.

We have only briefly indicated the main points in the work of a surgical dresser. He will receive a copy of the "Standing Orders" relative to this and each other appointment he may hold. The hospital expects, and rightly insists, that he shall pay strict attention to these orders, since he is no longer an irresponsible student, but for the time being one of the cogs in the wheel on whose integrity the smooth running of the hospital depends. With growing knowledge comes growing responsibility, and he must show himself worthy of the trust reposed in him.

THE OBSTETRIC DEPARTMENT.

After finishing appointments in the medical and surgical wards the student is posted to the Obstetric Department for six months. During the whole of this time he is also attached to the Physician for the Diseases of Children. The Obstetric Dresser is responsible for case-taking in the wards and at Out-patients, assists at operations, and during one month acts as *Extern in the Maternity Charity*. The Department has twenty-two beds reserved for gynæcological cases and eleven for the reception of cases presenting complications in pregnancy, labour and the puerperium. At present no beds are available for normal labour, but the pressing need for such accommodation is well recognised by the Hospital authorities and will doubtless be met in the near future. As an intervening link between the Obstetric and Children's Departments is the Salomons Centre, in which the health of mothers and infants is fostered by the practice of preventive medicine. The scope of the work done outside the wards is indicated by the fact that 2,300 attendances were recorded at Obstetric Out-Patients, while 2,150 women were attended in confinements in their own homes.

With this wealth of clinical material it should be possible for every student to obtain a sound knowledge of methods of diagnosis and treatment founded on no small experience. It is, however, recognised by teachers of Gynæcology and Obstetrics that this desideratum is not always attained. It is undoubtedly true that many a young practitioner has to admit a regrettable ignorance of the ailments which afflict his female patients and of the proper management of the pregnant, parturient and lactating woman. And these subjects form the foundation upon which a successful family practice is built. Responsibility for this sad state of affairs hardly rests with the student, but he will do well if he starts his clinical work with the firm determination to avoid the pitfalls that

beset his feet. He must realise that practical experience in diseases peculiar to women cannot be acquired in the space of the three months which he will spend in Queen Ward. As he passes from one appointment to another he must resist the tendency to develop the compartmental mind and must endeavour to cultivate a wide outlook on medicine as a whole.

The study of the physiology and pathology of the functions of Woman should be begun at the outset and continued throughout the period of clinical training. The man starting as Surgical Ward Clerk should include among his initial purchases a text-book on Gynæcology, for purposes of reference, and should make a point of attending the lectures of the Obstetric Surgeons. He should also avoid no opportunity of acquiring the "tactus eruditus" so essential to the accurate diagnosis of pelvic disorders; the inherent impossibility of permitting a class of students to examine women patients one after the other renders it imperative that this experience be gained over a considerable period of time.

The study of midwifery he may well leave until he becomes an Obstetric Dresser; the art of the Accoucheur cannot be learnt from books.

THE CHILDREN'S DEPARTMENT.

Physician-in-Charge, Dr. Cameron.
Chief Clinical Assistant, Mr. A. A. Osman.

In-patient accommodation.—Dr. Cameron has under his care 14 cots in the Children's Ward. On two days in the week, at present on Tuesdays and Thursdays at 2 p.m., Dr. Cameron goes round the ward and gives clinical instruction.

Out-Patient Department. — Children under 10 years of age are seen in the Children's Department at Out-Patients on Mondays, Wednesdays, and Fridays from 9.30 until 1 o'clock. Dr. Cameron attends on Mondays and Fridays at 10 a.m., when clinical instruction is given.

The Salomons Centre for the care of the mothers and children of the Midwifery Charity is now completed.

MEDICO-NEUROLOGICAL CLINIC.

The arrangements for the Medico-Neurological Clinic for the Winter Session are not finally settled, but they will be approximately as follows:—

(1) *Elementary Ward Teaching at 2 p.m.* Tuesday and Friday, Dr. Hurst; Thursday, Dr. Hunt; Monday, Dr. Symonds (Neurological).

(2) *Advanced Ward Teaching for post-graduates only at 10.30 a.m.* Tuesday, Dr. Hurst and Dr. Symonds (Neurological); Friday, Dr. Hurst and Dr. Hunt (Medical).

(3) *Clinical Demonstrations at 12 noon.* Tuesdays, in turn, Dr. Hurst (Abdominal) and Dr. Hunt (Thoracic). Fridays, in turn, Dr. Hurst or Dr. Hunt with a Surgeon or Specialist (Medico-Surgical), and Dr. Symonds (Neurological).

(4) *Out-Patients.* Medical, Tuesday, Dr. Hunt; Neurological, Wednesday and Saturday, Dr. Symonds.

THE DERMATOLOGICAL DEPARTMENT.

Out-Patient Days.—Tuesday, 9.30 a.m. (children), 10.30 a.m, (adults). Thursday. 9.30 a.m.

The Physician in charge of the Department also sees selected old cases, which require special investigation or treatment, on Wednesdays at 1.30 p.m., and anyone desiring to carry out a research in the Department may arrange with patients to attend at this time for the purpose of investigation.

Wards. There are three male and three female beds in the Medical Wards for dermatological cases requiring careful supervision or treatment in bed.

Instruction in the diagnosis and treatment of diseases of the skin is given in the Out-Patient Department, and clinical demonstrations on selected cases are held from time to time.

THE AURAL AND LARYNGOLOGICAL DEPARTMENT.

This Department is organised on the unit system. There are two units, one under the care of Mr. Mollison, the other of Mr. Layton. Patients are seen in the Out-Patient Department, admitted when necessary to the special wards, Ruth and Barnabas, and returned to the Out-Patient Department. This arrangement allows members of each unit to follow up the cases. Mr. Mollison's firm sees out-patients on Tuesdays and Fridays at 11.30 a.m., Mr. Layton's firm on Mondays and Thursdays at 11.30 a.m.

Dressers are appointed to the respective firms, and have every opportunity of becoming expert in the technique of examination of the ear, nose and throat, and of gaining experience in diagnosis and treatment. Large numbers of school children are seen, and about 1,000 minor operations are performed in the Out-Patient Department a year; these include, amongst others, operations for the removal of nasal and aural polypi, and of tonsils and adenoids, and for the lavage of the maxillary antrum; these operations are performed by the dressers under the supervision of the Surgeon or the Clinical Assistant.

Eighteen beds are now allotted to the Department and each firm operates twice a week. Mr. Mollison and Mr. Layton "take-in" during alternate weeks and emergencies are admitted under the care of the firm on duty.

THE OPHTHALMIC DEPARTMENT.

The Ophthalmic Department of the Hospital is in charge of the two Ophthalmic Surgeons. They are helped by two Assistants, two House Surgeons and Dressers. The dressers are appointed four times a year for a period of three months, and assist the Surgeons at Out-Patients and at operations, and are responsible for the recording of the cases both in the wards and at Out-Patients. The Ophthalmic Department is an open field for any student to explore as far as he is willing and able, the amount of clinical work being sufficiently great for him to see all the more ordinary and common diseases of the eye in the space of three months.

The student will soon find that he is quite unable to form any opinion of his own, on an ophthalmic case, until he has mastered the use of the ophthalmoscope and can readily and accurately decide what is the refraction of the eye, and if the "fundus oculi" is healthy and normal. The theory of retinoscopy can be taught and is simple; the practice, however, requires constant application by the student before he can hope to obtain any sort of facility in it. The difficulties are mainly initial ones, and any time and trouble expended in mastering them will well repay any man in after life when he has qualified and is in practice.

The Ophthalmic House Surgeoncy is one of the most important in the Hospital, as the Ophthalmic House Surgeon is not only in charge of the Ophthalmic beds, but also of Ear, Nose, Throat, and Orthopædic beds, so that his experience is wide and his responsibility great.

THE ORTHOPÆDIC DEPARTMENT.

The Orthopædic Department comprises a large out-patient clinic and ten beds devoted to patients suffering from deformity. Out-patients are seen on Monday and Wednesday afternoons, and in the Out-Patient Department the student will meet with every variety of deformity, congenital and acquired. Considerable facilities are afforded for experience in the relief and cure of all chronic diseases of bones, joints, muscles, etc. Instruction in the principles and most modern practice in the use of appliances, plaster technique, and the more useful forms of physio-therapy is given by Mr. Trethowan, the Orthopædic Surgeon, and Mr. Todd, the Orthopædic Registrar. Numerous operations of a minor nature are done, such as manipulations for stiff and painful joints, correction of mis-shapen and ricketty limbs, correction of scoliosis, and immobilisation of tuberculous joints.

The in-patient beds are devoted to the most serious operative cases, such as extensive tendon transplantations, correction of mal-united fractures, bone-grafting, the making of new joints, etc. Guy's is a pioneer in possessing an excellent workshop for the manufacture of every form of splint and appliance.

It is in the Orthopædic Department that the principles underlying the mechanical disabilities of the limbs and spine are emphasised and their explanation made clear, and the experience to be gained here is invaluable. The great utility of orthopædic surgery has become evident to very many during the war.

THE GENITO-URINARY DEPARTMENT.

Students acting as Dressers in this Department have excellent opportunities of acquiring knowledge which will be useful to them in actual practice and examinations. Out-patients are seen on Tuesday and Friday afternoons.

There are nine in-patient beds, seven in Cornelius Ward and two in Queen Ward. Students should realise that their attendance at this out-patient department, though not compulsory, is very necessary, as is evidenced by the very advanced state of disease in which some patients arrive for examination.

THE MASSAGE DEPARTMENT.

The New Department is now in full working order, and patients are treated between the hours of 2.30 p.m. and 4.30 p.m. on Mondays, Tuesdays, Thursdays and Fridays, and between 9.30 a.m. and 12 a.m. on Wednesdays and Saturdays.

Clinical Demonstrations are given at 2.30 p.m. on Mondays by Dr. Hunt, Physician in Charge, and at 10 a.m. on Wednesdays and Saturdays by Mr. Trethowan, Surgeon in Charge.

The point of interest to Medical Students is to see the work carried out on Patients by Massage and Medical Gymnastics. A large variety of cases are being treated daily which include fractures, stiff joints, dislocations, nerve injuries and disease, lung and heart disease, congenital conditions, and poor development in Children, &c. Students will find interest in following some investigations which are being carried out under the direction of Dr. Hunt, and those who wish to attend in his section of the Hospital should apply to him.

THE TUBERCULOSIS DEPARTMENT.

(Dr. Marshall).

The Tuberculosis Department is a reference department for out-patients suffering from disease of the chest. Patients attend on three days in the week, Tuesday and Friday afternoons and Wednesday evenings. In suitable cases arrangements are made for admission to sanatoria. The patients return to the Out-Patient Department after leaving the sanatorium. The Department provides extensive opportunities for studying methods of investigating early and doubtful cases of pulmonary tuberculosis, also for observing special forms of treatment such as Artificial Pneumothorax.

PRACTICAL PHARMACY, MATERIA MEDICA, AND DISPENSING.

One of the many important things all medical students must know is how to write a prescription. It may even be necessary for the majority, when qualified, to be able to dispense the same. All students, therefore, would be well advised to acquire as much knowledge of the subject as they can.

The student is taught, practically, how to dispense the different medicinal preparations; he learns to write prescriptions, due regard being paid to doses and incompatibilities.

The recognition of crude drugs, their active principles and preparations, form part of the course, which covers the syllabus of the Practical Pharmacy of the Conjoint, the Intermediate M.B.Lond., and the Third M.B.Camb.

DENTAL SCHOOL.

The Dental Student is supplied at the Medical School Office with the Prospectus, Standing Orders, List of Instruments, Calendar, and Clubs' Union Book.

These pamphlets should be carefully read in order that acquaintance may be made with the general arrangements of the school and the scope of the work upon which the student will become engaged.

Notices regarding the time and place of Lectures are to be found posted up at the main entrance of the Dental Department.

Instruments having been purchased at a dental depôt, the student should satisfy himself that he has been supplied with all of those described in the hospital list.

It is inadvisable to purchase instruments before they are required. Instruments for prosthetic work are required for the B.D.S. course at the commencement of the 2nd year, and for the L.D.S. course at the commencement of the 1st year. Clinical instruments are required for the B.D.S. course at the commencement of the 5th year, and for the L.D.S. course at the commencement of the 3rd year.

Among the various depôt at which instruments may be purchased are the following:—Claudius Ash, Sons & Co., Broad Street, Golden Square, W.C.; Dental Manufacturing Co., Alston House, Newman Street, W.; and Cottrell & Co., 15, Charlotte Street, W. 1.

The course of study for the B.D.S. London covers a period of five years, of which the first year consists of Physics, Inorganic Chemistry, and Biology. The second year is occupied with the study of General and Dental Anatomy, Physiology, Dental Histology, Pharmacology and Dental Prosthetics. The study of these subjects is also continued in the third year, together with Pathology, Bacteriology, and Surgery. Clinical work in the wards, Surgery, Medicine, Anæsthetics, Pathology, and Bacteriology, together with Dressership in the Extraction Rooms, Dental Metallurgy and Dental Prosthetics forms the fourth year's work, and the fifth year is occupied by purely Dental subjects, these being Clinical work in the Conservation Room, Orthodontics, Operative Dental Surgery, and Dental Surgery and Pathology.

First and second year students for the L.D.S. have a simple routine to follow. Their work is confined chiefly to Dental Prosthetics, but Chemistry and Physics and Dental Metallurgy are also studied and should be passed, the first two subjects during the first and the third during the second year.

Third and fourth year students for the L.D.S. commence the clinical courses with a two months' period of probationary work upon the phantom head. The operative course, conducted by a staff demonstrator, is very comprehensive. It includes most of the conservative operations that the student will subsequently be called upon to perform upon patients, namely, gold and other fillings, crowns, inlays, and the treatment of devitalized and septic teeth. These operations upon the dummy form an excellent ground work in operative dentistry.

Thereafter the course of work consists in holding and diligently carrying out the work of the following appointments:—Clinical Clerk in the Conservation Room; *Probationary Dressership in the Conservation Room; *Dressership in the Conservation Room; *Dressership in the Children's Department; Dressership in the Ordinary Extraction Room; Dressership in the Gas Extraction Room; Casualty Dressership; Clerk to Anæsthetist.

A student, apart from those holding the post of Assistant Dental House Surgeon or Clinical Assistant, is not allowed to work in the Conservation Room unless he holds one of the appointments marked *.

The time varies, according to whether the course for the B.D.S. or L.D.S. is being taken, at which a student will come into actual contact with Hospital patients, but he should always endeavour to be punctual in his appointments with them. There is nothing more irritating and annoying to a patient than to be kept waiting unnecessarily; it also delays to a very great extent the easy working of the Department. Further, the student should remember that the cultivation of a courteous and gentle manner towards all patients will become in the future probably the greatest asset in his private practice.

Dental students will profit by following the practice of the Special Departments of the Hospital, *e.g.*, Eye, Throat, Ear. They will also have numerous opportunities of observing the more remote effects of dental disorders in the General Wards and Out-Patient Department.

Students in difficulties about their work and needing advice are invited to consult the Dean, Sub-Dean, Resident Dental Officer, or any other member of the Staff, who will be pleased to do what they can to promote the interests of students.

OSTEOLOGY.

The question of the purchase of bones is always an important one. Millikin & Lawley, in the Strand, make a speciality of supplying the medical student with this part of his equipment.

BOOKS.

The student who wishes to obtain his books at once should not take the first he sees on any particular subject, but would be wise to consult his demonstrators first. The number of text books is very large, and the choice is a difficult matter to the inexperienced. Roughly speaking, second-hand books are very seldom worth anyone's while to buy, chiefly because medical science is progressing so rapidly that new editions are constantly being published.

The number of publishers of books for medical students is great. Messrs. Churchill publish Taylor, Jacobson, Goodhart, Fagge, and many other well-known works. Messrs. Macmillan publish Allbutt, Foster, and a great number of first-year books; Messrs. Longmans, Green & Co., publish the famous Gray's Anatomy. Mr. H. K. Lewis, 136, Gower Street, publishes a number of medical books, and has also a medical circulating library which is valuable to students who wish to see all the latest books. Mr. Murray also publishes many well-known medical books, as also do Smith, Elder & Co., Philip & Son, Cassell & Co., Nisbet & Co., and Baillière Tindall & Cox.

All books can be obtained from Mr. H. H. Grattan, in Borough High Street, who is the "official bookseller" to the Hospital. Many well-known books he can supply over the counter; any others desired he will have in an hour or two.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

ON October 5th our famous contemporary the "Lancet" celebrated the first centenary of its existence. We take this opportunity of offering, to all concerned, our heartiest congratulations on the successes of the past and present, together with our best wishes for the future. Those who have read the history of the "Lancet" cannot fail to be impressed with the benefits which its columns have brought, not only to the medical profession, but to the public as a whole. No greater proof of its value as a journal could be needed. (Incidentally it is pleasing to recall that the first clinical lecture reported in the "Lancet" was one delivered by that most famous of all Guy's surgeons, Sir Astley Cooper.)

THE world of Guy's and all that belongs to it is naturally smaller than that of the medical profession as a whole, but we can justly claim that in that world the Guy's GAZETTE has played its proper part. Its aim has always been to supply an up-to-date chronicle and critique of Hospital events, Medicine, Surgery and Dentistry. We are proud to think that last year the GAZETTE entered upon its fiftieth year of publication, and we trust that in the hands of our successors, and with the continued support of all those interested in Guy's, it will rise to still greater successes than it has achieved in the past.

It is with pleasure, then, that we announce a forthcoming improvement in the GAZETTE. At a recent meeting of the GAZETTE Committee it was decided that the time had come when the printing, and the quality of the paper used, could be justifiably bettered. This decision will come into force with the first number of the new volume in January, 1924. A better quality paper will be used, the printing will be improved and certain slight alterations will be made in the setting of the type, and the arrangement of headlines, etc. The new style of paper will enable much better reproductions of photographs to be made, and we trust that by the various other alterations the whole tone of the GAZETTE will be raised.

Together with the above improvements, which we are about to introduce, the question of putting a cover on the GAZETTE was discussed. No decision on this point was made, however, as it was thought better to ascertain the views of our readers beforehand. We trust that those who are interested in the GAZETTE will send us their suggestions or criticisms as to this matter, and, should a cover be desirable, we will detail, in a future issue, the

suggestions which we have received from the printers, or possibly submit, with one of the issues, a specimen cover.

We are able to announce in this issue the result of the Gazette Competition, details of which have been announced from time to time in previous issues. We regret that owing to illness Dr. Lauriston Shaw had to resign his position as one of the judges in the Competition, but we were fortunate in securing the services of Dr. J. A. Ryle, who took Dr. Shaw's place. The other two judges were Mr. Frank Briant, J.P., M.P., and Col. F. E. Fremantle, F.R.C.P., F.R.C.S., M.P. Copies of all the sentences submitted were forwarded to the judges, each of whom marked them on a percentage basis. Finally the Editor decided upon these three sentences to which most total marks had been awarded by the judges.

As will be seen from the names and addresses of the prizewinners the Competition created quite a widespread interest throughout the world, though we feel that in the Hospital itself it might have met with more support.

The First Prize was awarded to:—

Miss B. M. Bradley,
Ravenslee, King's Avenue, Parkstone, Dorset

Sentence: "*Your son and heir needs sun and air.*"

The Second Prize was awarded to:—

Capt. E. A. Penny, I.M.S.,
British Headquarters, Tien-Tsin, N. China.

Sentence: "*Live Clean! Your health is your Children's birthright!*"

The Third Prize was awarded to:—

Dr. A. T. Nankivell,
Town Hall, Highgate, N.6.

Sentence: "*Dirt and Disease go hand in hand.*"

Cheques will be forwarded to these prizewinners in the course of the next few days.

We have received a letter from a Ward Clerk pointing out the deficiencies and lack of accommodation in the Clinical Theatre for Clinical Lectures, and also the undesirability of holding these lectures at 1.30 p.m. With regard to the first point we must admit we entirely share his view. Although the Clinical Theatre is more suitably built for demonstrations of cases and specimens, the Anatomical or Physiological Theatres are far better able to cope with the enormous "gate" to which our correspondent calls our attention. The Wards are now crowded with vast numbers of men ranging from the keen and enthusiastic to the super-keen, but the atmosphere of the Clinical Theatre when packed to overflowing with these men is more conducive to drowsiness than to attention to the learned words of the lecturer.

The time the lectures should be held has, from time immemorial, been a bone of contention among men in the Wards. Various pathology lectures are held at 12 o'clock, and we cannot help feeling that it would take an extraordinarily superhuman individual to proceed straight away to a Clinical Lecture at 1 o'clock and thence to a Ward Round at 2 o'clock—all three feats being performed on an empty stomach. It might easily lead to the deplorable habit of furtive sandwich munching! It would be interesting to know when "Medical Ward Clerk" intends to have lunch!

We would like to draw attention to a letter in the last Gazette on the subject of the Olympic Games. It will be, we think, a great pity if a subscription, however small,

is not sent to the Olympic Fund from Guy's. Other hospitals and universities are subscribing generously and the athletic prestige of the Country is something, which should closely affect us as a body of sportsmen. Any subscriptions, however small, will be willingly received by L. G. Housden and acknowledged in the GAZETTE.

WE have received the financial statement for the Annual City and Hospitals Charity Athletic Contest held at Honor Oak Park in June. The Contest resulted in a credit balance of £72 14s. 11d., of which £20 has been allotted to Guy's. We are indeed grateful to the Committee, which arranges this meeting each year, and wish them far more support for their future meetings than they have received in the past.

ON Thursday next, October 18th, at 5 p.m., the Inaugural Meeting of the Pupils' Physical Society will he held in the Physiological Theatre. Sir W. Arbuthnot Lane, Bart., C.B., M.S., will address the Society on "The Medicine of the Future," with the President, Sir William Hale-White, K.B.E., M.D., in the Chair.

We feel sure that all who can will be present at this meeting to welcome the opening of yet another successful season for the oldest of the Hospital Medical Societies.

Tea will be served, and an exhibition of books and surgical instruments will be held, in the Physiological Laboratory at 4 p.m.

OUR sincerest congratulations to Mr. T. G. D. Bonar on his success in the recent examination for the Fellowship of the Royal College of Surgeons of Edinburgh, and to the following successful candidates in the Scholarship Examinations:—

GUY'S HOSPITAL MEDICAL SCHOOL.

Open Scholarship in Arts:—

William Smyth Baxter, Foyle College, Londonderry; John William Crow, Charterhouse. Equal, £50 each.

Scholarships for University Students:—

War Memorial Scholarship:—

David Lurie, B.A., Oxon. £80.

Open Scholarship:—

William Dunstan Boileen Read, B.A., Oxon. £80.

Scholarships in Junior Science:—

Confined Scholarship:—

Ernest Thomas Conybeare, Plymouth College and Guy's Hospital Medical School. £100.

Open Scholarship:—

Raymond Ewan Fossey, Brighton Grammar School and Guy's Hospital Medical School; Elwyth Mendonhall Sharples, Queen's College, British Guiana. Equal, £50 each.

GUY'S HOSPITAL DENTAL SCHOOL.

War Memorial Scholarship in Arts:—

Diarmaid Clency Buckley, King's College, London, and Guy's Hospital Medical School; Walter Patrick Roe, University College School. Equal, £20 per annum each for 4 years.

Junior Science Scholarship:—

Frederick Sydney Warner, Guy's Hospital Medical School. £20 per annum for 2 years.

Norman Charles Yendell, Clifton College and Guy's Hospital Medical School. £20 per annum for $3\frac{1}{4}$ years.

ERRATA.

We regret the occurrence of a mistake in the list of In-Patient Attendances which we published in the last issue of the GAZETTE. Dr. Hurst teaches in his wards on Tuesday and Friday afternoons, and not on Monday and Thursday mornings as announced.

Guy's Hospital Biennial Dinner

Wednesday, October 17th, 1923.

Dear Mr. Editor,

I am sending you the list of those who have so far signified their intention to be present at the Dinner. Tickets have been sent to all those whose names appear in the accompanying list.

By far the greater number of men have already notified me near whom they would like to sit—and this has greatly facilitated the arrangements—but I would ask anyone who has not done so to return to me immediately the notice accompanying the ticket, as therein requested.

If this is done I hope to be able to arrange that each diner will find himself seated among his own particular group of friends. On the other hand, it will be impossible for me to carry this satisfactorily into effect in the case of those whose replies reach me later than the morning of Monday, October 15th.

Of course, if there are any Guy's men who have been unable so far to decide to come, and yet find at the last that they can do so; or if there are any who, on looking over the accompanying list see names which induce them to come, I hope that they will apply to me *at once* for a seat, informing me in the letter near whom they would like to sit. I will then do the best I can for these late comers who, though late in applying, will be none the less welcome.

I am, Sir,
Yours sincerely,
ARTHUR W. ORMOND,
Hon. Secretary.

LIST OF GUY'S MEN WHO HAVE SIGNIFIED THEIR INTENTION TO ATTEND THE DINNER.

1854—1879.

1854†Dixon, John.
1869 Durham, Frederick.
Bird, Tom.
1871 Burroughs, J. E. B.
1874*James, Col. Culver.
1875 Symonds, Sir Charters J. K.B.E., C.B., C.M.G.
Lancaster, H. F.
1876*Mansell, E. R.
Dring, W. E.
Oram, R. R. W.
1878 Beale, E. Clifford.
Leigh, W. W.
1879 Hale-White, Sir Wm., K.B.E.
Howell, T. A. I.
David, W. W.

1880—1889.

1880 Ashwell, H. G.
1881 Pitt, G. Newton.
Lane, Sir Arbuthnot, Bt., C.B.
1882*Sells, H. T.
Howell, James B.
Fraser, James A.
1884 Counsell, H. E.
1885 Price, Alfred E.
1886 Tubby, A. H., C.B., C.M.G.
Sandoe, J. W.
Lansdale, Wm.
Andrews, E. Collingwood.
1887 Beard, Frederic.
Holloway, S. F.
1888 Randall, Philip N.
Marriott, H. B.
Holman, F. K.
Collington, F. A.
Roberts, Astley C.
1889*Holman, H. J.
Lansdown, R. G. Poole.
Black, G.
Beyts, Col. W. G., C.B.E.
Rouw, R. Wynne.
Fripp, Sir Alfred, K.C.V.O., C.B.

1890—1899.

1890*Pilcher, Col., C.B., C.B.E., D.S.O.
Stevens, T. G.
Fawcett, John.
1891*Roberts, C. Gordon.
Hopson, Montagu F.
Jewell, J. W. F.
Parfitt, J. B.
Pollock, C. E., Maj.-Gen. C.B., C.B.E., D.S.O.
Craig, Sir Maurice, C.B.E.
1892 Daldy, A. M.
Young, F. C.
Floyd, S. G.
Turner, F. M.
Birdwood, G. T.
1893 Keay, Colin.
Eyre, John.
Wilson, F. Wallace, M.B.E.
Jewell, W. H., O.B.E.
Edwards, Francis H.
Biggs, J. J. E., Lord Mayor of Cardiff.
1894 Allport, A.
Bryant, Charles H.
Collier, H. W.
Robinson, W. E.
Munro, H. A.
Duffitt, H. A.
Brereton, Lt.-Col. F. S. C.B.E.
1895*Key, M. A. Aston, O.B.E.
Tyson, Wilson.
*Clarke, A. V.
Ashwin, R. H.
Ensor, C. A.
Beadnell, C. Marsh, Surg. Rear Admiral.
Steward, F. J.
Hovenden, A. C.
Hovenden, G. S.
Jones, Murray P.
Handley, W. Sampson.
1896*Howell, John, C.B.E.
Tebbitt, Ernest, R.
Hinchcliff, C. J.
Spriggs, Edmund.
Knowles, C. H.
Fagge, C. H.
Partridge, A. H.
Rowlands, R. P.
Stead, C. C.
Millbank-Smith, H.
Reed, J. C. G.
Poole, T. Brice
Ormond, A. W., C.B.E.
Robertson, J.

Moon, R. O.
Goadby, Sir Kenneth, K.B.E.
1897*Starling, H. J.
East, W. Norwood.
Way, Montague.
Mayston, R. W.
Moore, Julius.
Smith, W. H. M.
Fremantle, Lt.-Col. F. E., M.P.
1898*Barrow, Lt.-Col. H.P.W., C.M.G., D.S.O.
*Swan, R. H. Jocelyn, O.B.E.
Turner, Philip.
Moore, P. W.
Wernet, A. J., Srg.-Cpt. R.N.
Wills, W. Kenneth.
Henson, W. J.
Nicholson, C. R.
Eason, H. L., C.B., C.M.G.
1899*Pearce, F. J.
Berncastle, H. M.
Kirkman, A. H. B.
Rowland, E. W. S.
Parsons, J. E. H.
Crawford, V. J., Lt.-Col.
Cole, P. P.

1900—1909.

1900 Gray, Major A. C. H.
Goble, E. W.
Thomas, T. P.
Clarke, Edward.
Marriott, Oswald.
French, Herbert.
Parrott, H. McDowell.
Butler, J. A.
Shattock, C. R.
Aylen, G. H.
Bagshawe, H. V., Lt.-Col. C.B.E., D.S.O.
Ness, K. C.
Camps, P. W. L.
Brydone, J. M.
1901*Atkins, Sir John, K.C.M.G.
Hardenberg, E. J. F.
Tilbury, R.
Bent, S. C. H.
Lewin, G.
Roper, Richard S.
1902 Pinching, Charles.
Shipway, F. E.
Morgan, T.
Reynell, W. R.
Beadel, A. J.
1903 Spriggs, N. I.
Robinson, G. C. F.
Goldie, E. G.
Louisson, M. G.
Parfitt, F. W.
Mann, H. Corry.
1904 Griffin, E. H.
Hurst, A. F.
Routley, E. W.
Hughes, Frank P.
Mollison, W. M., C.B.E.
Ticehurst, G. A.
Hughes, E. C.
Ward, E. Lewis.
1905*Harrison, E. M.
Cameron, H. C.
Lowe, E. Cronin.
McBride, John.
Mills, Major P. S.
Crofts, A. Douglas.
Clarke, H. M.
Knight, H. S.
Payne, O. V.
Palmer, F. W. Morton.
Watney, H. A.
1906*Johnston, Prof. T. B.
Goodhart, G. W.
Vandermin, H. F.
Malleson, H. C.
Litchfield, P. C.
Bankart, A. S. Blundell.
Ripman, C. H.
Palmer, A. S. Morton.
Stebbing, George F.
Davies-Colley, R.
Bookless, J. S.
Berry, A. W.
Marshall, Geoffrey.
Trethowan, W. H.
1907 Carr, T. E. Ashdown.
Jones, C. E. M.
Dryland, G. W.
Aubrey, H. P.
Carlill, Hildred.
Watson, J. F. N.
Reynolds, R. J.
Densham, Arnold.
Henderson, H. J.
Saunders, S. McKenzie, Major.
Laidlaw, P. P.
Leeming, A. Norman.
Air, S. H. C.
1908*Denning, A. F. W.
Seymour-Price, P.
Kent, Hugh B.
Mandell, L.
Price, C. E.
Ewing, A. W.
Lucey, Herbert C.
Ryffel, J. H.
1909 Brook, Stanley.
Lees, A. Everard.
Druitt, D. C.
Attwater, H. L.

1910—1919.

1910*Elliott, E. L.
Bromley, L.
Mullally, G. T.
Barber, H. W.
Gardiner, Harold.
Saner, F. D.
Chapple, H.
Doubleday, F. N.
Fox, W. E.
Kidd, W. Shirley.
Cox, A. Neville.
1911*Warner, H. P.
*James, H. L.
Cook, Frank.
Sandison, Alexander.
Jepson, A. C.
Mutch, N.
Daw, Hubert.
McNair, A. J.
Hind, G. R.
Worster-Drought, C.
Glendinning, V.
Billing, E.
Lloyd, F. G.
1912 Hoby, H. J.
George, W. Stanley.
Slesinger, E. G.
Passey, R. D.
Housden, C. H.
Zamora, A. M.
Eccles, G. B.
Genge-Andrews, G. E.
Redding, J. Magnus.
1913*Moberley, A. V.
Tanner, W. E.
Ryle, J. A.
Roberts, C. S. Lane.
Morgan, O. Gayer.
Hancock, Allen.
Saul, Capt. E. R.
Ogilvie, W. H.
Wood, T. Neville.
1914*Pritchard, G. B.
Symonds, C. P.
Hearn, R. J.
Stallman, J. F. H.
Young, W. A.
Pedley, Chas. F.
Boswell, P. R.
Parry, J. H.
1915*Kendall, N. E.
*Curle, R.
Sells, R.
Scott, E. A.
Easton, W. A.
1916 Halden, Richard J.
Bates, K. L.
Jones, J. Gaymer.
Braine, J. Carter.
Wacher, H. S.
Kidman, G. E.
Phillips, E. S.
Hirsch, V. R.
1917 Conybeare, J. J.
Bulleid, Arthur.
Woodruff, Keith M.
Boness, —.
Staley, R. C. W.
Knowler, F. R.
1918 James, John.
Griffin, J. H.
Millett, H.
1919 Gray, St. George B. D.

1920—1923.

1920	Turner, T.		Gregor, J. B.		Harris, H. A. H.
	Crisp, Eric J.		Churchill, H. C.		Harvey, H. W.
	White, Stanley V.	1922	Williams, P. H.	1923	Lloyd, E. A.
	Woodroffe, B. C.		Allin, J. F.		Bingay, J. V.
	McAlpin, K. F.		Moore, B. R.		Ballard, R. C.
1921	Hodgkinson, R. J.		Sharvill, K. G.		Widgery, F. W.
	Myatt J. H. D.		Nuthall, E. T.		Jackson, M.
	Smith, J. Stuart.		Hooper, K.		Shaw, G. Drury.
	Nootts, Geoffrey.		Biddle, E. J. F.		Whitlock, Denis.
	Richardson, Philip L.		Richards, E. H.		Way, K. T. G.
	Watson, L. K.		Stoker, G. M.		Baylis, H. Paxton.
	Power, E. Maynard.		Meacock, Stanley P.		*President of the Residents.
	Ward, H. Read.		Bradfield, G. R. D.		

* Vice-Chairmen. † Date of Qualification.

Also Viscount Goschen, Major Reginald Bonsor, Canon J. B. Haldane, Major Oswald Magniac, Sir E. Cooper Perry, H. P. Shepherd, Esq., Sir Charles Stewart, K.B.E., W. J. Walford, Esq., F. P. Whitbread, Esq., and the Editor of the Guy's GAZETTE.

Bright's Disease.

A few weeks ago an article on Bright's Disease was published in the GAZETTE. Subsequently two of the Senior Physicians have delivered clinical lectures on the subject.*

While the writer of the article was at particular pains to dissociate Bright's Disease from Nephritis, both lecturers used Nephritis and Bright's Disease as synonymous terms. The difference between the two attitudes is not merely one of nomenclature, it is one of fundamental conception.

In the article it was argued that the condition to which the name Bright's Disease was properly applied half-a-century ago was a separate entity and not a kind of nephritis.

One gathered from the article that there could be distinguished clinically a group of patients who had, in some measure, the following characteristics in common:—

1. Fairly advanced middle age.
2. Insidious onset of "feeling of unfitness."
3. Cerebral symptoms—headaches.
4. Occular symptoms and signs.
5. Cardiovascular changes—Raised blood Pressure, Hypertrophied left ventricle, Præcordian Pain. Cerebral Hæmorrhage.
6. Renal Symptoms and Signs—Slight Polyuria, Slight albuminuria, low specific gravity urine.
7. Uræmic manifestations—Subjective sensations, "fits," coma.
8. Post-Mortem Changes—Cardiovascular, Renal and Cerebral.

In some individuals the renal changes predominate, in others the cardiovascular and in others the cerebral. (For example some die of cerebral hæmorrhage before the renal symptoms are noticed.)

Thus the writer of the article sought to differentiate on clinical grounds such a syndrome as this, from acute nephritis and from chronic nephritis resulting from an acute inflammation, or from a known chemical or toxic poisoning. In other words, Bright's Disease was classified as a general condition of imperfectly understood pathology and nephritis as essentially an inflammation of the kidney.

It may be that modern physicians believe that the distinction between Bright's Disease (the syndrome described above) and nephritis is arbitrary and unsound. If, on the other hand, such a condition is recognised as a separate entity, then, either Bright's name should be retained for the condition, or there should be devised for it some other distinctive name.

As usual we must turn to the columns of the GAZETTE for further enlightenment.

R. G. W.

*Dr. Fawcett on a case of Bright's Disease occurring in a young man with uræmic symptoms. Dr. Hurst on Bright's Disease.

Stridor in Children.

CLINICAL LECTURE BY Dr. H. C. CAMERON.

GENTLEMEN,—

By stridor we mean the noise of breathing obstructed in the larynx or trachea. If the sound originates in the nose or palate we speak of stertor not stridor. The causes of stridor in young children, some of which are common and some very rare, may be set out as follows:—

LARYNGEAL STRIDOR.

1. Congenital laryngeal stridor.
2. Laryngismus stridulus.
3. Pertussis.
4. Laryngitis stridulosa or croup.
5. Catarrhal or streptococcal laryngitis (non-diphtheritic).
6. Diphtheritic laryngitis.
7. Œdema of the glottis—angeioneuritic, with scalds, septic, dropsical.
8. Papilloma of the larynx.
9. Foreign body in the larynx.

TRACHEAL STRIDOR.

1. Enlarged thymus.
2. Retropharyngeal abscess.
3. Pressure of enlarged mediastinal glands —tuberculous, sarcomatous, lymphadenomatous.
4. Goitre.

I propose to discuss some of the more important points in differential diagnosis and treatment.

LARYNGEAL STRIDOR.

Congenital laryngeal Stridor.—Very occasionally we meet with a condition of congenital laryngeal stridor. This name has been given to a form of dyspnœa which begins at birth or very shortly afterwards. Most mothers will state that it was the first thing they noticed when they saw the child. Respiration is noisy, with a curious croaking or crowing inspiratory sound, which softens so as to be almost imperceptible when the child is asleep and becomes very loud with restless movement or excitement. In spite of the apparent difficulty the child seems comfortable. There is no cyanosis, the cry is normal and expiration is unaffected. As a rule the stridor persists unchanged for the first six months or year of life and then begins to lessen. By the end of the second year with the growth of the larynx it has usually completely disappeared or is heard only occasionally.

We do not know precisely the cause of these peculiar symptoms. Probably Thomson is right in regarding it as primarily functional in origin due to a want of proper co-ordination of the respiratory muscles. Certainly many of these children exhibit at the same time other functional neuroses and are generally excitable and nervous. The appearance upon laryngoscopic examination is as if the little larynx had collapsed with a falling backward of the epiglottis. If the trachea and larynx are removed from the body of a newly-born child at the post-mortem examination and suction is made through a tube inserted into the cut end of the trachea, a similar inspiratory collapse of the glottis can be produced. The glottis in these particular children would appear to be more than usually liable to collapse under the negative pressure produced by inspiration. The forced inspiratory movements may result in considerable deformity of the chest wall which may persist throughout life. Congenital laryngeal stridor is apt to prevent successful breast nursing because of the remarkable dyspnœa upon exertion. The first impression conveyed by the spectacle of the noisy obstructed breathing of the infant is that there is something seriously wrong. The mothers all make the same complaint; that they sueffr much from the misplaced sympathy of strangers. One mother complained that it was not possible to send the baby out with the older children. It was always "back in half an hour," under the convoy of a district nurse or a well-meaning stranger, who felt that something was radically wrong with the child.

Treatment.—We are not able to influence directly the degree or duration of the spasm. Especial care should be taken to prevent catarrh of the air passages.

Laryngismus Stridulus.—Occasionally in excitable children we meet with attacks of "breath holding," which seem to be only a bad habit, or at most an inhibition of muscular co-ordination due to the violence of the emotions, fright, anger or grief. Cases of this nature may occur in older children up to the age, perhaps, of six or eight years, who are unduly nervous, undisciplined or excitable. In contrast to the similar seizures in younger chil-

dren, which are associated with rickets and spasmophilia, the attacks although alarming are without danger to life. In some cases it is possible to detect that the child is fully aware of the stir and alarm which he can create by his attacks and that if he is so minded he can do much to control them. In such cases the treatment must be directed towards improving the management of the child. The attacks must be ostentatiously neglected or treated as foolish misdemeanours.

The name laryngismus stridulus, however, is better reserved for those cases of laryngeal spasm and apnœa, which are combined with other evidences of increased excitability of peripheral nerves. The name spasmophilia has been given to a condition not uncommon in children in the first two years of life in which we have clear evidence of increased excitability and conductivity in the nervous system. Thus muscular contractions may be provoked by the application of a galvanic current to the nerves in a strength which would be normally quite ineffective. (Erb's Sign.) In other cases it may be possible to demonstrate this increased excitability at the bedside by evoking a visible contraction of the orbicularis oris or some other of the facial muscles by a light tap upon the facial nerve on the cheek (Chvostek's sign), or again by producing a spasm of tetany in the hand by encircling the upper arm with a bandage applied sufficiently tightly to cause some degree of cyanosis of the hand and maintaining the pressure for a few minutes. (Trousseau's sign.) These three signs have been called the signs of *latent* tetany. They are of importance because they serve to foretell the coming of an attack of *manifest* spasmophilia, or they may persist after the attack is over and serve to indicate its nature in cases which otherwise might be doubtful.

It is unfortunate that, of the three, Chvostek's and Trousseau's signs are only present in a proportion of the cases, while Erb's sign requires a somewhat elaborate apparatus to elicit it.

The common symptoms of so called *manifest* spasmophilia are three, laryngismus stridulus, carpopedal spasm or tetany, and generalised convulsive seizures. It is with the first of these alone that we are concerned at the moment.

In the most severe form of laryngismus stridulus the attack begins suddenly. The child throws back its head and the respiration ceases. The face becomes at first pale, gradually growing more and more cyanosed. In complete silence the child struggles for breath for ten or twenty seconds or even longer. Then the spasm yields and a long stridulous inspiration is taken, producing a whoop like or crowing sound. In cases of great severity the spasm may continue until consciousness is lost or the attack may end in general convulsions. Laryngospasm may even be fatal. The attacks are commonly repeated many times during the day and night for two or three days in succession. Not all the attacks are of equal severity. As a rule the milder predominate with but one or two of alarming severity. The symptom is most common in children of from six months to fifteen months. Before six months it is very rare. Attacks are seldom met with in breast-fed infants. They are, perhaps, more common in fat and overnourished infants. There is a close association between laryngospasm and rickets and the two disturbances are frequently met with in combination in the same child. In the milder attacks inspiratory movements persist throughout and each breath is caught with great difficulty and is accompanied by the characteristic crowing sound. Any disturbance of the child which is resented, as in altering its position or dressing or undressing, may be sufficient to provoke an attack. It is probable that a fatal laryngospasm is the explanation of some cases in which infants left unattended in their cots have been found dead. In two cases which have come to my notice death was attributed to suffocation by a cat which was found in the room. Yet in both cases the children were strong and capable of very lusty movement. It seemed more probable that they had been waked from sleep by the animal and the fright had produced the fatal laryngospasm. Neither had been heard to call out. One of the children was known to be spasmophiliac.

The cause of spasmophilia is almost certainly to be found in the lowering of the percentage of calcium in the blood and in the nervous system. The physiological effect of calcium is to depress nervous excitability. Diminution of the calcium percentage is therefore accompanied by increased excitability.

Laryngismus stridulus can hardly be confused with congenital laryngeal stridor, which persists unchanged for months or even years,

and which gives rise to but little subjective discomfort or distress. Nor should confusion arise with laryngitis stridulosa or non-membranous croup, in which stridor is persistent for some hours and is associated with hoarseness and a clanging cough.

In croup there is a great and obvious dyspnœa lasting for a considerable time without relief, in laryngospasm there are short-lived and threatening attacks of apnœa or of obstructed inspiration with a high pitched crowing sound. Confusion with the laryngeal spasm of whooping cough is perhaps more frequent and more justifiable. If in a child there happens to be a combination of a cough with attacks of laryngospasm, as happens of course not infrequently, the attack of coughing is very likely to provoke the laryngospasm. In such a case the simulation of whooping cough may be very close. It is at least difficult to make any distinction between the two conditions when we have to rely upon the mother's description and have not an opportunity of ourselves witnessing a seizure. In such a case the presence of Chvostek's or Trousseau's signs, of tetany or of repeated generalised convulsions would make clear the correct diagnosis.

Treatment.—Treatment during an attack must be prompt. When it is known or apprehended that such attacks may occur the mother or nurse should be taught how to push the lower jaw forward and if possible to draw the tongue gently forward with tongue forceps. If those who are in charge of the child are capable of carrying out this manœuvre and can be trusted to use judgement in employing it only in severe attacks and when it becomes urgently necessary to restore respiration, it is probably the most successful treatment to adopt. When possible a trained nurse should be placed in charge until the spasmophiliac tendency has been controlled. Respiration may also sometimes be induced by the shock of cold water thrown over the face. If as seldom happens the doctor is present during an attack artificial respiration should be carried on while a little chloroform is administered. The risk of death, though undoubtedly present, is yet so slight that it becomes in many cases a difficult question to decide whether or not it is necessary to tell the mother of the possibility and thus to add greatly to the alarm which the attacks already occasion. If the mother is solely responsible for the treatment in the emergency it is well that she should be as cool and collected as possible. It is better when possible to explain the precise risk to some other member of the family, unless the mother is unusually composed and self controlled.

Between the attacks every effort must be made to lower the undue excitability of the nervous system. Calcium bromide may be given freely for some days, twenty grains per diem for a child of a year, and with it may be combined chloral hydrate in doses of from five to ten grains per diem. After a few days these amounts may be reduced, but the sedative should be continued in smaller doses for some weeks. If, as is often the case, signs of rickets are present at the same time, antirachitic treatment must be carried out. In any case cod liver oil is probably of value.

Pertussis.—The whoop of whooping cough may be mentioned here because of the occasional difficulty in distinguishing between it and laryngospasm provoked by a fit of coughing. In young children, with whom alone the difficulty can arise the paroxysm of pertussis is seldom seen in its full development and the true whoop is not often heard. As a rule mothers complain merely that the cough catches the child's breath. Often the question can only be decided by finding evidence of the presence of spasmophilia, or, on the other hand, of exposure to the infection of pertussis. Laryngospasm is certainly much more amenable to treatment with calcium bromide, while the violence of the spasm, if due to pertussis, is likely to increase steadily as the disease progresses in spite of all treatment.

Laryngitis stridulosa. Croup (non-membranous). Catarrhal laryngitis.—The word croup is used popularly to imply any condition of laryngitis with stridulous breathing. In practice we have to distinguish between catarrhal laryngitis with added spasm, or laryngitis stridulosa, and the much more serious condition of diphtheritic laryngitis. The differential diagnosis will be discussed under the latter head.

Croup or catarrhal laryngitis is a very common disorder in young children over six months of age. There is a strong individual and family predisposition towards it. In some children an ordinary cold in the head is always ushered in with an alarming attack of laryngitis, and this may be repeated many times in the course of the winter. The obstruction to inspiration is due in great part to muscular spasm and different

children react in different measure to an apparently comparable infection. In some, and these are often quick, nervous and excitable children, the slightest irritation provokes severe and even alarming spasm. As might be expected croup in infancy is found with some frequency in families with an asthmatic tendency and the adult asthmatic will often be found to have been a notable sufferer from croup in childhood. In both conditions one attack predisposes to the rapid return of another, in both to maintain a high level of general health and to discipline and strengthen the nervous system is a great part of prevention and cure. Both, too, are made worse by fussy and over anxious management.

Laryngitis stridulosa may begin with startling suddenness, almost always in the night. The child wakes from sleep, fighting for breath. Inspiration is especially obstructed and the loud, hoarse, inspiratory stridor may be heard at a great distance. The movements of the chest are exaggerated, there is considerable inspiratory recession of the lower ribs. The head is generally held well back, and the movements of the larynx increase in amplitude. In spite of the great distress and difficulty the child is not livid or cyanosed, but as a rule flushed, bright eyed and feverish. The voice is hoarse and husky, but comparatively loud. There is no true aphonia. The cough may be incessant, and has a brassy, ringing character. After some hours of this distress, as a rule sleep comes, and with sleep a sudden cessation of the distressing symptoms. In the morning it is generally apparent that the child has a severe cold, perhaps with some bronchial catarrh, but the urgent symptoms are absent. Distress, however, may return at night and this may be repeated many nights in succession.

In all this, in the suddenness and severity of the nocturnal onset, in the appearance of danger which yet never culminates in true suffocation the resemblance to spasmodic asthma is considerable.

In other cases of catarrhal laryngitis the nervous element is less marked and spasm less pronounced, while the catarrh may be more persistent and the symptoms less intermittent. It is in cases of this sort that the differential diagnosis presents a real difficulty. In severe cases of catarrhal or streptococcal laryngitis of this sort there be extreme dyspnœa, cyanosis, pallor, prostration and even death. The laryngitis which ushers in an attack of measles sometimes assumes this severe and threatening form.

Treatment.—Emetics, the steam kettle and hot fomentations over the larynx are the usual remedies applied in the common cases of laryngitis stridulosa. Emesis may be procured by ipecacuanha wine, given in doses of from ten to twenty minims every quarter of an hour till vomiting ensues. Or a hypodermic injection of apomorphine may be given. Apomorphine hydrochloride 1/100 grs. for a child of one year old. Below this age it should not be prescribed.

If an attack is apprehended small doses of chloral hydrate (3 grs. for a child of a year), or Palv. Ipecac. Co., 1 gr. for each year of the child's age, given before going to bed may prevent or minimise the severity of the spasm. To prevent the attacks we must enquire into the general hygiene of the child's life and especially endeavour to control undue nervousness and excitability by wise and sensible management. The attack should be treated in a quiet and matter of fact way and the child should not be alarmed or made apprehensive. In milder cases if his attention is caught, as indeed it has been in the day time when the spasm remained in abeyance, by permitting him to play with toys or books for a little, the spasm will often diminish. In the severe cases in which spasm plays but a little part and the inflammatory swelling of the larynx is great, a hot mustard bath should be given at the outset and stimulants may be required. There are very exceptionally cases of catarrhal laryngitis, in which diphtheria can be definitely excluded in which, nevertheless, intubation or tracheotomy is forced upon us by symptoms of impending suffocation.

Diphtheritic laryngitis.—It is not often that the larynx is directly attacked by diphtheria, without a simultaneous infection of the fauces or tonsils. Yet such cases do occur and may give rise to great difficulty in their diagnosis from catarrhal laryngitis. Diphtheritic laryngitis, as Trousseau has said, "usually installs itself insidiously, catarrhal laryngitis sets in with a great fracas." From the first, prostration is a more prominent symptom. Instead of a flushed feverish and restless child, we find pallor, lividity, exhaustion. The voice disappears early in laryngeal diphtheria, in catarrhal laryngitis it per-

sists, though hoarse and raucous. In diphtheria, cough is a much less prominent symptom and though there is stridor it is not the noisy obstructed breathing of catarrhal laryngitis, but a softer stridor which becomes steadily more and more insistent. The temperature in laryngeal diphtheria is seldom greatly raised, but the pulse may be rapid and feeble, sometimes irregular from the first. The presence of albuminuria speaks for diphtheria. If cultures from the larynx show the presence of the Klebs Lœffler bacilli, and in all cases where any doubt whatever can reasonably exist cultivations should be made, diphtheria of the larynx is certain. No conclusion can, however, be drawn from a negative culture and we must then rely upon our clinical experience. Diphtheria must be assumed if there is severe constant and increasing dyspnœa with aphonia and prostration.

Treatment.—The treatment indicated is the immediate injection of anti-toxin.

Œdema of the Glottis.—Rarely in cases of angeioneurotic œdema (q.v.) or urticaria we meet with sudden attacks of dyspnœa due to œdema of the glottis, under the mucous membrane of which a serous exudate has taken place. The symptoms of laryngeal obstruction which result may appear very threatening. Nevertheless, as in the similar serous exudate in the bowel wall, which may give rise to symptoms of acute intestinal obstruction; experience shows that spontaneous recovery without operative interference is the rule. Such attacks occur only in older children. As a rule they tend to recur, and to be accompanied by other symptoms of the vasomotor neurosis.

Treatment.—Icebags may be applied to the throat, and a hypodermic injection of morphia or adrenalin (min. 2 to 4) or an intramuscular injection of one grain of calcium chloride may be given. If actual suffocation appears to be impending, in spite of all that can be done intubation may be attempted, but is difficult to perform. Tracheotomy is the last resource and may be ineffective.

Syphilitic Laryngitis.—Gummatous disease of the larynx, which in adult and acquired syphilis is a not uncommon cause of laryngeal obstruction is met with in congenital syphilis in older children only with the very greatest rarity. In the infant with congenital syphilis the voice is often characteristically hoarse, but there is little dyspnœa or evidence of obstruction in the larynx.

Œdema of the glottis may also occur in the late stages of nephritis as part of a general anasarca. It may also accompany inflammatory lesions in the neighbourhood, such as erysipelas of the neck or retropharyngeal abscess. A scald from the inhalation of steam or of irritating vapours is a common cause with young children.

Treatment.—In inflammatory œdema treatment consists of scarification of the swelling or in making multiple punctures. Ice should be applied to the neck and ice should also be swallowed. Leeches may be applied to the neck with good result. As a last resource tracheotomy should be performed.

Papilloma of the Larynx.—The only new growth which is met with in children save in the rarest possible instances is a small pedunculated papilloma which may be attached to any part of the larynx. The symptoms which usually date from the first year of life, are hoarseness and loss of voice with paroxysmal cough. These may be present for a long time and the diagnosis usually suggested is one of chronic laryngitis. Attacks of dyspnœa are less common and occur only in the later stages. The diagnosis can only be made by means of the laryngoscope. The treatment of these cases belongs to the specialist. Operative removal through the mouth is apt to be followed by recurrence. Radium has been said to give good results. At times it is necessary to give complete rest to the larynx by the continuous use of a tracheotomy tube worn for many months.

Tracheal Stridor.

Tracheal pressure from without.—The trachea may be pressed upon from without by a variety of conditions, such as an enlarged thymus, a retropharyngeal abscess, a goitre or a mediastinal swelling, whether abscess, sarcoma, lymphadenoma or caseous tuberculous gland. In such cases the symptoms differ somewhat in character from those due to laryngeal obstruction. The stridor is less purely inspiratory and the difficulty of expiration may be equally or more marked. The position which the child adopts in the attempt to gain relief is different. In laryngeal obstruction the head is com-

monly thrown well back and the neck is extended to the full. In tracheal pressure the head is kept flexed and any attempt to extend it clearly adds to the difficulty. The movements of the larynx which are amplified in laryngeal obstruction are not so noticeable in pressure upon the tracheal obstruction. In trac heal stridor the voice persists unaltered.

Enlarged Thymus.—The frequency with which enlargement of the thymus gives rise to clinical symptoms is very differently estimated. It has been maintained by some, on very doubtful grounds, that the sudden deaths which occur from time to time in children who are the subjects of that condition of generalised lymphoid hyperplasia, which is known as status lymphaticus are due to the enlargement of the thymus, and to the direct effects of its pressure. However, this may be, it is certain that at times we do meet with infants in whom breathing is apparently obstructed by the size of the thymus. The infants in my experience have been of unusual size and weight, in two instances the birth weight was over eleven pounds. Seen shortly after birth there was evidence of tracheal obstruction and the respiration became greatly embarassed when the head was entended. By X-ray examination the shadow of an enlarged thymus was apparent. In both cases weight was rapidly lost after birth and coincidently with this the breathing improved. In inanition the thymus gland undergoes a rapid atrophy and it is probable that the best treatment in such cases is so to manage the diet that a moderate loss of weight ensues. In a few instances the symptoms have lasted much longer, and in some have only disappeared in the second year. Excision of the thymus has been recommended and practised in such cases. Success has also been claimed for the use of radium.

Retropharyngeal abscess.—A cause of dyspnœa in young children with pressure upon the trachea which is sometimes overlooked and which should always be remembered, is met with in cases which occur from time to time of retropharyngeal abscess. Only occasionally is the retropharyngeal abscess tuberculous and and connected with caries of the adjacent vertebræ. Much more frequently, at least in young children, the abscess originates in suppuration in the retropharyngeal lymphatic gland. Most commonly the neighbouring lymphatic glands in the neck are enlarged or suppurating at the same time and there is frequently a recent infection of the tonsils or a severe nasopharyngeal catarrh. The symptoms of retropharyngeal abscess originating in this situation are threefold The first complaint is almost always of stiffness and pain in movement of the neck. Secondly, and somewhat later, there is difficulty in swallowing, with an accumulation of saliva at the back of the throat. The last symptom to appear and that which indicates that the abscess is pointing in the retropharyngeal wall is stridor and obstructed respiration. The combination of these symptoms, each appearing in due order, should make the diagnosis plain if the possibility of the condition is borne in mind as it should be in all cases of stridulous breathing in young children. The swelling is easily palpable by a finger passed down the posterior pharyngeal wall. If fluctuation is obtained, and at times there may be considerable obstruction from a gland which, although enlarged, has not yet proceeded to suppuration, the abscess should be opened by the touch of a guarded scapula, without anæsthesia or with only the lightest anæsthesia. Suppuration in the retropharyngeal gland is a dangerous state. The children are almost always very ill and the mortality in young infants is high.

Tuberculous glands deeply seated within the posterior mediastinum occasionally press upon and finally rupture into a bronchus. This condition while it gives rise commonly to characteristic physical signs in the chest and to a paroxysmal cough resembing in some cases the spasms of whooping cough, only exceptionally causes stridor. It is a condition which is found not infrequently as the cause of sudden death in infancy, when the contents of the tuberculous gland have suddenly been evacuated into the bronchus.

Goitre.—In countries where goitre is endemic cases are reported of severe pressure upon the trachea in young children from goitres of large size.

Sarcoma. Lymphadenoma.—Occasionally we meet with growths of this nature giving rise to pressure upon the trachea with resulting stridor. Enlargement of other and more superficial lymphatic glands, obstruction to the superior vena cava with cyanosis and enlargement of veins are symptoms likely to develope sooner or later in cases of stridor due to pressure from a growth.

University of London Union Society.

Throughout the Session 1919—20, the possibility of the Students of the University of London providing themselves with a Union was canvassed and discussed among the various Colleges, and early in 1920 a definite step forward was taken by the formation of a Provisional Committee of representative students. It was thought unadvisable to establish a University Union on the basis of a federation of existing College and Hospital Union Societies, and the promotors of the Union therefore adopted a basis of individual membership.

After the Colleges had been circularised on the question of the formation of a University Union, the Provisional Committee, encouraged by the ready response which met their appeal took the step of calling a General Meeting of the students of the University which was held at King's College in February, 1921. By a Resolution passed at this meeting the University Union was formally established. Mr. B. I. Evans, the first President of the Union Society, occupied the Chair on that occasion, and the following brief extract from his speech gives, perhaps, the best indication of the hopes and ideals of the founders and promotors of the Union. Speaking from the Chair he said :—"The scope of the University is imperial and its influence international, but its scattered Colleges have in the past prevented its students from realising its position. . . . It was felt that perhaps, in spite of the difficulties, there did exist a spirit of Union in the University. An appeal was made, limited at first, for the establishment of a Union, and the Vice-Chancellor honoured us with his council and advice. Within three weeks of last term 300 students had promised to join, and now within three months 950 students have made a similar promise by individual request without a public meeting having been held. If we decide to go forward nothing can hinder our success."

Succeedin gevents have amply justified Mr. Evans' words. From the outset the Union obtained over 1,000 members, and throughout the succeeding years the membership has been maintained in the neighbourhood of this figure.

In November, 1921, the Union was officially recognised by the Senate of the University, and throughout its career it has enjoyed the constant support and advice of leading officers of the University.

From the foregoing extract it will be seen that the general object underlying the foundation of the Union was a desire to promote a sense of unity among the students of the University, and this has been the main object of the Union's policy from the time of its foundation. For those who desire a detailed statement of the aims and objects of the Union they may be stated as follows:—

1. To establish a centre for student activities, a platform for Debates, a library and a reading room, etc.

2. To link up the whole University as a single unit, and by means of meetings to bring students into contact with what is best in the thought and activity of the outside world.

3. To represent the students of this University in their relation with those of other Universities, to establish contact with Dominion students and fellow students throughout the world.

All Matriculated students whether Internal or External, who are pursuing a course of study for any higher examination of the University, are eligible for membership of the Union. Students taking full time courses at the Colleges or Schools of the University, qualified past students, members of the Academic Staff and members of the Senate, are eligible for membership. Students taking full time courses at Institutions having teachers recognised by the University of London are eligible for membership upon showing to the satisfaction of the Committee that the course of study they are pursuing is of a University character.

The annual subscription is £1 1s. with an entrance fee of 10s. 6d. Payment may be made at the Union during Office hours, or by cheque or postal-order addressed to the Treasurers at the Union. A form of Banker's order is provided which may be signed by a member or by any other person on his behalf. The form should be sent to the Treasurers for registration and transmission to the member's local bank who will then pay each annual subscription as it becomes due. The use of this mode of payment is very convenient to the Treasurers, but it is entirely at the option of members. An order may be varied or cancelled at any time by a request to the manager of the member's bank.

To meet the convenience of members, the Treasurers are prepared to receive the subscription of £1 1s. or £1 11s. 6d., in the case of new members, in terminal instalments of 10s. 6d. as follows:—the first on election or within the first fortnight of the first term, the second within the first fortnight of the second term, and the balance (if any) within the first fortnight of the third term. Non-payment of an instalment by the appropriate date will involve immediate lapse of membership.

One of the first objects of the Union after its foundation was to secure Club Premises for its members. The necessity of having not only ordinary Club Rooms, but also a Debating Hall, made the

task of obtaining suitable premises a matter of some difficulty. With a view to the erection of a permanent building at a later date when sufficient funds had become available, it was felt desirable that premises should be found for the Union on the proposed University site in Bloomsbury so that the Union might be adjacent to any other University buildings erected in Bloomsbury in the future. In April, 1922, this object was secured by the purchase of the Pickwick Huts in Malet Street. These temporary premises are now known as "The University Union," and in July, 1922, the office of the Union was transferred here from No. 15, Gower Street, where it had been temporarily accommodated. The Union was formally opened by Lord Haldane on November 7th, 1922.

The rooms at present available for the use of members include a Debating Hall, which has a seating capacity for 500 and which was in frequent use throughout last session. Fortnightly Debates will be held here during the winter terms of the present year, and a number of other functions will be arranged in addition. There are also separate Lounges for Men and Women and when the remainder of the premises have been completed and equipped, provision will be made for a Common Lounge, a Dining Room, and accommodation for resident caretakers. It is hoped that sufficient funds will be forthcoming to enable these improvements to be undertaken in the course of the coming session.

In the Men's and Women's Lounges the usual club facilities are provided for members, including the provision of writing materials and the supply of current periodicals. The rooms have been most comfortably furnished and facilities are provided for members to meet at the Union and to attend the various meetings.

Arrangements have been made to supply teas and light refreshments between the hours of 4 and 6, and 8.30 to 9.30 p.m., and it is hoped to give more extended facilities in this direction in the near future.

The Union premises are open from 2.30 to 10.30 p.m. Members may introduce visitors on signing the Visitor's Book with the proviso that no member may introduce into the Union's rooms more than once any person eligible for membership.

In addition to the Union's Office there are also a number of Committee Rooms, two of which are in regular use, one by The National Union of Students and the other by The University of London Athletic Union. It has been the object of the Union to give every assistance to University Societies and such Societies desiring to use the Committee Rooms or the Debating Hall for General Meetings, should address an application to the Secretary. A small fee is charged to cover the cost of lighting and other additional expenditure incurred by the Union.

The official organ of the Union is *Vincula*, which is published on alternate Thursdays during term time, price 3d. per copy. It is of the utmost consequence that students in the scattered Colleges of the University should keep in touch with each other and with University and Union activities, and this they are enabled to do by *Vincula*.

The *University of London Union Magazine* has hitherto been an annual publication, appearing in the Summer Term. It contains verse and prose by students and also articles by distinguished people outside the University.

A *University Diary* has been compiled for the session 1923—24, and is being published at 1s. 9d. It is hoped that this publication, which will contain useful information relating to student activities in the University, will prove of service to students and others. The Diary is being published for the first time this session, and the continuance of this publication will depend upon its reception during the coming year.

In order to raise the necessary funds for capital expenditure an Appeal Committee was formed in March, 1922, under the Chairmanship of Sir Wm. Beveridge, K.C.B., with Sir Sydney Russell-Wells, M.P., as Treasurer. Donations have been received from many old students and friends of the University and the Senate has assisted with a loan of £200 and a Grant of £400 which they have recently generously increased by a further Grant of £200. The Union has contributed from its ordinary revenue the sum of £280. More money is required to complete the development of the Union premises, and donations for this purpose will be gratefully received. Further information concerning the aims of the Appeal Committee can be obtained from Mr. G. P. Crowden, the Secretary of the Appeal Committee, University of London Union Society, Malet Street, W.C.1. Donations may be sent to the Honorary Treasurer of the Appeal Fund, Sir Sydney Russell-Wells, M.P., at The University Union.

In some respects the coming session is perhaps the first year in which the activities of the Union will have reached a state of normality. In the past the Union has been handicapped in the matter of accommodation for its meetings and by the difficulties it encountered in providing club facilities for its members. It is hoped that the improvements which have been effected at the Union, and which will be further continued during the year, will enable the Union to fulfil all its functions as the recognised Undergraduate Club in London.

Those who desire to become members of the Union should complete and return the form of application for membership to be had in the Wills Library. Further copies of the application form may be obtained on application to the Secretary, University of London Union Society, Malet Street, London, W.C.1.

Pain.

Paper read before the Physical Society by Mr. J. A. Currie.

Mr. Chairman and Gentlemen,—

It would be impossible in a paper of this nature to deal completely with so wide a subject as Pain. I am unable, therefore, to put before you a comprehensive review of the literature as an atonement for my lack of originality. Certain aspects of the subject which are of especial interest form the basis of this paper, but I have been obliged, owing to a lack both of time and of knowledge, to refrain from discussing in detail one of the most fascinating aspects of the question.

This is the point of view of the psychologist as regards pain—the question of pain and its relation to neuroses.

Most of the paper is devoted to an attempt to treat pain either as a protective mechanism, or as a definite symptom of some definite lesion or lesions, but it would be interesting to hear, in the discussion which follows the papers to-night, the views of members of this Society upon pains for which there is no demonstrable organic basis.

From the earliest stages of his development, pain has been man's most potent sensation. Even before the mammalian central nervous system had attained sufficient development to be capable of an appreciation of pain, an equivalent to the pain reflex, an urgent impulse to avoid harmful stimuli, was one of the most typical of the animal's reactions to its environment. Even the simplest forms of life shun what is noxious and seek what is beneficial to them.

Pain is, in man at any rate, a universal experience, yet it is one which for ages has rested under a cloud of misconception. In spite of the fact that philosophers and divines innumerable have dealt with it from a purely general point of view, it has remained, until comparatively recently, a subject about which singularly little of scientific value has been written.

Early writers treated it as some form of divine interposition. The primitive pagan conception of pain as a manifestation of wrath, gave place later to the higher idea of pain as a disciplinary measure applied to mankind, for mankind's benefit, by a beneficent Deity.

Although we may, with the theological writers of all times, from Moses to the austere Puritans, recognise that education may be a painful process; that pain may be a means of learning what is harmful and what to avoid; that experience acquired through pain is not easily forgotten—in short, that the burnt child fears the fire—yet, when we see the ravages made upon human health and character by pain in disease, it is impossible to regard all pain as a useful and beneficial dicipline, applied to the individual for the good of his soul

Within certain limits—"the narrow limits of recoverable injury"[1]—possession by the individual of the pain sense, and liability to pain, are undoubtedly an asset, a prominent factor in his survival; but from a purely individualist standpoint it is difficult to accept the vast amount of pain experienced in this world as consistent with any moral or physical benefit to the individual when it is compared with the harm done by the intensity of his suffering.

To the biologist, however, the survival of the race is the paramount consideration. We owe this survival largely to the protective influence of pain. Although pain may be at times functionally useless to the individual it would be unreasonable to cavil at the existence of a sense to which we owe so much.

A man dying of inoperable carcinoma may experience pain, which is, from his point of view, utterly useless, and which is one of the factors concerned in his death. But had his forbears been deficient in that very sensibility, a derangement of which is now tormenting him, he might not have existed at all. Nature, in her dispensations, often seems to overdo things.

Before considering the relation of pain to disease, it will be as well to review briefly some of the more important physiological facts which have been discovered in relation to this sense.

Pain is the most widely distributed of our senses. In the skin, where pain-spots and other tactile spots co-exist, the pain-spots are the more numerous. Pain fibres are distributed to muscles, joints, and almost all structures of the body; even, according to one great teacher and his followers, to the viscera.

The pain sense obeys Müller's Law of Specific Irritability in that special pain fibres carry the pain impulse, which is, however, evoked by any of the usual forms of stimulation, electrical, mechanical or thermal. Pain has a high threshold value. To arouse it requires a stronger stimulus than to evoke the sensation of heat. At the same time, when the threshold is passed, the resulting reaction is very strong indeed in the case of pain, all other impulses being subservient.

If a pithed frog be subjected to stimuli, which under ordinary circumstances would be painful, the resulting movement is prepotent over all other reflexes, and is, moreover, independent of postural change.

Finally, in the cornea, which has only the pain sense, it has been observed that all the nerve fibres end in free naked arborizations. It has been assumed from this, that pain nerves all end in this way, and we have in this assumption, if it is justified, some explanation of the unique character of the pain impulse, since all other senses seem to be served by some special form of end organ. In the words of a recent writer, in a medical review,[1] "The sensation 'touch' is easily evoked and flows quietly and easily into the sensorium, its sole effect being to inform the subject of a simple movement at the periphery. The sensation 'pain' is more difficult to evoke, but when its threshold is reached, it seems suddenly to burst upon the sensorium, liberating a veritable explosion of reactive energy."

We are able to localise, with fair accuracy, the position of any nocuous stimulus applied to our bodies. It is suggested by Howell[2] that this localisation or projection of pain sensations owes its accuracy to the concomitant stimulation of pressure spots. Certainly, the quality possessed by the various pains which we recognise, such as toothache, a burn, or the throbbing pain of an abscess, is due to the simultaneous excitation of other senses than pain.

Pain is one of our primitive sensations, and it is in the nervous centre for most of our primitive emotional reactions, the optic thalamus, that the centre for pain reflexes is located. The thalamus, the great cell station on the sensory path, receives sensory fibres of various kinds from different parts of the body, and has in its turn a connection with the cerebral cortex, the higher, discriminative area.

It must not be assumed that the urgent reactions which painful stimuli arouse, whose centre is the optic thalamus, are uncontrolled. If they were, man would be a helpless automaton, reacting excessively at all times to every chance painful stimulus, however slight, which he experienced.[3] Happily a control over the functions of the thalamus is exercised by the cerebral cortex, and it is only when the intensity of the stimulus is severe enough that the urgent and immediate reflex response is called into play.

When, however, the cortico-thalamic fibres are destroyed by disease, so that the thalamus is free to act uncontrolled, painful stimuli produce an exaggerated response on that side of the body which is opposite to the lesion.

A similar effect may be produced by lesions of the thalamus itself.

A more detailed consideration of the protective influence of pain in mammalian evolution takes us a step further in our conception of the value of this sense. Starling[4] gives an excellent account, based on Sherrington's experiments, of the effect of noxious stimuli upon the spinal dog, and the pre-potency of the reflexes so produced over other, less urgent, movements. If the dog step upon a sharp point that would tend to damage his foot, or if any other painful stimulus be applied, it will be seen that the dog raises the injured member sharply, at the same time thrusting downwards with the foot of the opposite side. Reciprocal innervation of the muscles of both legs is called into play, and by this "stepping" reflex nature provides not only for a removal of the part dangerously affected, but also for the first step in the act of progression away from the scene of danger.

It has been proved experimentally that if this "stepping" reflex be excited while another less intense stimulus, such as that producing the "scratch" reflex, is at work, the latter will be totally inhibited in favour of the more powerful pain reflex.

This is but one instance of the many reflexes whereby animals are protected from harmful stimuli. Speaking broadly, these reflexes must have been perfected, in accordance with Darwin's great principle, by a process of natural selection, those races which readily acquired new reflexes tending to survive, while the others—the slow-witted, sluggish monsters

of the reptilian era, for instance—failed to compensate for their ingrained stupidity even by their immensity and strength.

We must now turn from the phenomena of pain in relation to evolution and to normal physiology, to a consideration of pain in disease.

It is hardly an exaggeration to say that there is no symptom for which the doctor is more frequently consulted than pain; and while there are few more distressing symptoms, at the same time there are few which are of greater diagnostic assistance to the clinician. Pain is, of course, but one of many symptoms, and it would be as wrong to overestimate its value, in defiance of other considerations, as it would be to neglect its obvious importance as a manifestation of disease.

The fact that tenderness can be elicited on palpation is of even greater importance than subjective pain, for it is notorious that pain is dependent in some way upon the patient's nervous organisation, or upon his or her nervous state at the moment. Discussing dysmenorrhœa, the "Ten Teachers" say, "One person will receive smiling a blow on the head which would knock-out another. And it is well known that the same person will feel pain differently at different times."

We will consider, first, the ordinary pain, locally demonstrable at the site of inflamed tissues, which is manifest in most inflammations and injuries. I refer to the kind of pain one meets most often in the Back Surgery—the pain of a whitlow, a boil, a burn, or a sprain. These manifestations may be so severe as to deprive the patient of sleep, and even of health, and are by no means negligible, although the more fascinating field of referred and visceral pain naturally possesses a greater attraction for researchers.

What is the real cause of this local pain in inflammation? MacCallum[5] is not inclined to accept the view that it is due to tension, as evidence has been adduced to show that pressure and tension are not effectively painful stimuli. Local anæsthesia can be produced by injecting an indifferent solution into the tissues until they are distended.

Another view is that the poisons which cause the inflammation also irritate the neighbouring nerve endings. This is possible, but it must be remembered that burns are painful, though not necessarily infected. The toxins produced by the injury to the tissues may account for the irritation, however. Sunburn is not painful at the time when its effects are being produced, but later, when the inflammation is at its height. There seems to be much support for the view that the pain is due to a hyperexcitability of the local nerves, caused by hyperæmia.

But no one who has opened an abscess in the Surgery can fail to appreciate the instant relief afforded to the patient when tension is removed.

It is not only in normal circumstances, in the evolution of protective reflexes, but also in the abnormal conditions induced by disease, that pain acts as a monitor, preventing the patient from submitting himself to further injury. In pathological phenomena, however, nature sometimes overshoots the mark, and even when the limits of recoverable injury have been exceeded, pain may still be intense.

I will quote as an instance of the protective influence of pain a commonplace phenomenon familiar to us all. Which one of us, having a cut finger, or a septic hand, does not soon become unpleasantly aware that he has only one organ in his body that matters, and that that organ is the finger or hand in question. Injured parts always seem to bear the full brunt of any violence, however promiscuous, which occurs in their neighbourhood. This produces a conscious avoidance of undue movement and painful knocks, and gives the injured limb a rest and the reparative processes their opportunity.

Hilton[6] emphasises this in his description of our first parents, thrust out of the Garden of Eden, and submitted for the first time to a painful injury. The fear and suffering induced by the first wound, and the sight of blood, impress upon them the necessity of rest to the parts, and nature performs her task unhindered by disruptive movements.

But reflexes resulting from pain are even more important than conscious inhibition. Hilton has pointed out the fact that the internal surfaces of joints, for instance, are supplied by the same nerves as those which supply

the muscles activating the joints. He mentions, among others, the knee and shoulder joints. The result of injury is to set in motion a series of painful impulses to the same centre as that which supplies the motor apparatus, which is, in its turn, stimulated to activity. Now, in the knee-joint, the flexors are the stronger muscles, and the result of these impulses is to produce a fixed and flexed condition of the joint, with inhibition of movement. So persistent is Nature in her over-correction in disease, that this flexion may be actually injurious, and it behoves the surgeon to correct Nature's correction.

Hilton was not content to apply this principle merely to joints. He considered its application to the viscera equally apposite, and instances the action of the abdominal muscles in cases of visceral disease. I shall have occasion to refer to the question of visceral pain later on, when dealing with the work of Head and MacKenzie.

Students of the subject—and who can neglect it?—owe a great deal to Hilton. His observations foreshadowed the later researches of the two I have just mentioned, and the principles laid down in "Rest and Pain" will always remain sound and true, although he may be proved to be wrong in some details.

Hilton was *par excellence* a surgeon who applied anatomy to surgery. He showed that pain, *per se*, was not necessarily evidence of inflammation at the site of pain, and that when unaccompained by heat, and other classical signs of inflammation, it might be attributed to an exalted sensitiveness of the nerves, due to quite remote causes. Discarding for the moment the term "sympathetic," he attempted to consider the obvious and intelligible question—what association of nerves will cause this pain? What nerve is able to be the exponent of pain in such a precise situation, and what are its connections?

Patients judge by the position of their pain. The doctor cannot afford to. He cannot, if he values his reputation, attribute local pains to local causes without investigation. The pain may be due to remote causes on the discovery of which successful treatment depends.

Hilton quotes some particularly instructive instances of this fact. On one occasion, in a patient suffering from disease of the spine, the prominent symptom was great pain over the lower abdomen and pubes. There were paralysis and loss of sensation of the lower extremities, with an area of hyperæsthesia just above the insensitive area. The patient was ordered rest in bed, with tartar emetic ointment to be rubbed over the diseased spine, but owing to his conviction that the trouble lay where he felt the pain, he insisted upon rubbing the ointment well in, upon the pubes and skin of the scrotum, with most unpleasant results. Needless to say, this did him no good, although Hilton's treatment—rest in bed, and attention to general health, eventually cured him.

(To be continued).

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—When I was invited to return from New Zealand, by the Cape, to lecture on Dr. Truby King's methods, I little thought to find a six 'months' tour of the Union arranged under the joint auspices of the Child Welfare Societies of S. Africa. The people are vastly interested and steps are already afoot to secure nurses with "Truby King's" training. The South African Trained Nurses' Association have been particularly active and progressive, and the Cape Branch had me booked for four lectures and a social evening before I arrived. In Johannesburg the Nurses are equally alive to the value of this work and the value of the certificate. Miss Alexander, R.R.C., the progressive and genial Matron of the General Hospital for 20 years (over 600 beds, and with a Maternity and Childrens' Hospital attached, 3 Assistant Matrons, 24 Sisters, 300 Nurses), occupied the chair at the public reception; and it was amazing to find how much she knew, not only of the T. K. work and T.K. Nurses, but nursing affairs generally throughout the world—there are not four high walls here. The General Hospital was the first booked for a professional lecture, and the Matron kindly gave a dinner when I met the Assistant Matrons and the Sisters and several Matrons from other hospitals.

Among the Sisters I met my old fellow Pro., Sister Price, who had Strings for Queen; at the Reception, Nurses Templeman and Evans, both married and no longer known by these names, and in Cape Town, Mrs. Harwood (née Ward), who went to Bloemfontein many years ago as Sister. She came to my lantern lecture in Cape Town. As she said, she came to hear me, but stayed to listen to Dr. King's methods. It has been most delightful meeting so many old Guy's; one only wished the programme were not so full in order to have more time to talk over old times.—Yours, etc.,

J. B. N. PATERSON.

Guy's and Freemasonry.

SIR,—If you can, and will, turn back a few years you will find in the GAZETTE a short correspondence re the above subject.

About the time of the founding of the Bart.'s lodge, a fairly strong movement was made to bring Guy's up to date in the matter of Freemasonry, but it came to nothing, being frowned on by the authorities, who, many of them, considered the existing fraternity of Guy's men all sufficient.

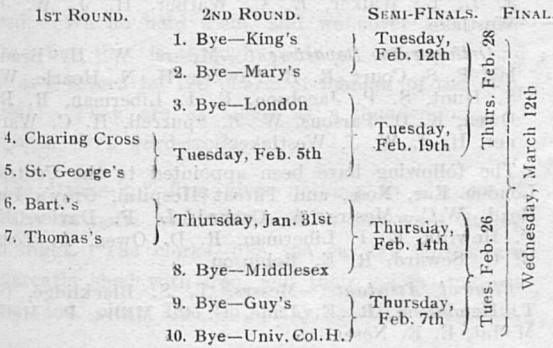
Although it was, at the time, a personal disappointment, I think that they were perhaps right, for, as a Founder of both my old school lodge and my university lodge I have found the masonry bond a feebler one than that of earlier school life; still, I should welcome and would gladly contribute to the birth of another Guyite bond. I enclose my card, and am, Sir, Yours, 30°.

Rugby Football.

DEAR SIR,—May I draw the attention of your readers to an error in the Fixture Card for Season 1923—1924.

The draw for the United Hospitals' Rugby Football Cup should be as under and not as stated on the card.—Yours faithfully,

H. KEITH WILLIAMS,
Hon. Sec.



DEAR MR. EDITOR,—There are two points to which I should like to give prominence through the medium of the GAZETTE.

In the first place, why is it that Clinical Lectures still continue to be given in the Clinical Theatre when it is far too small for this purpose? It was only a fortnight ago that I was anxious to hear Mr. Mollison's lecture. I managed to get as far as the steps leading to the Clinical Theatre, and found a large crowd of men half inside and half outside the door, with several others turning back long ere the door was reached. This sort of thing has happened so many times before that it was to be hoped that those responsible for these arrangements would have seen the futility of using such a small lecture theatre.

Secondly, what a pity the lectures on special subjects on Mnodays are not given at 1 o'clock instead of at 1.30, for then men doing the junior ward appointments could attend. As it is this is impossible when there happens to be a "round" at 2 o'clock. And, moreover, the senior men would be benefited, for then after the lecture they would still be able to "go round" with the physician or surgeon at 2 o'clock.

Trusting these two suggestions can be brought into being,—I remain, Yours sincerely,

A MEDICAL WARD CLERK.

Guy's Hospital, S.E.
8th October, 1923.

Guy's Hospital War Memorial Fund.

FURTHER DONATIONS.

Amount already acknowledged (vide GAZETTE March 17th, 1923	£5,554	14	10
Dr. B. H. Palmer	2	2	0
"From an Old Guy's Man"	10	0	0
E. R. Webb, Esq.	2	2	0
W. A. Bulleid, Esq. (Final instalment of £26 5 0)	5	5	0
Dr. E. D. Scott (Final instalment of £5 5 0)	4	4	0
	£5,578	7	10

Appointment.

ROYAL NAVAL VOLUNTEER RESERVE.

Late Temp. Surg. Sub.-Lieut. St. G. B. D. Gray transferred to permanent list as Surg.-Lieut. (Sen. August 3rd), and attached to the London Division, List II.

Change of Address.

W. E. Wallis, Cedars, East Grinstead.

G. H. R. Manfield, 64, Clarendon Street, Nottingham.

Guy's Hospital Medical School.

Students' Appointments.

October 16th, 1923—January 15th, 1924.

Clerks to Medical Units (Second Three Months).—(Dr. Beddard) Messrs. E. H. J. Berry, C. P. Blacker, R. V. Cookes, H. G. Davies, A. C. Lysaght, F. H. Pratt, J. C. T. Tregarthen; (Dr. French) Messrs. C. B. Andreae, S. B. Browning, A. E. Hill, B. Horwitz, H. L. Peake, W. S. Whimster; (Dr. Hurst) Messrs. I. C. P. Beauchamp, J. Evans, A. S. Gough, G. T. Hankey, H. E. Lewis, D. W. E. Lloyd.

Junior Dressers.—(Mr. Turner) Messrs. W. H. Dowell, J. C. Fast, W. D. Sheldrake, A. F. H. Stewart; (Mr. Hughes) Messrs. J. H. Anderson, A. C. Copley, John Simons, S. V. Strong; (Mr. Davies-Colley) Messrs. E. T. Kitchen, A. H. Musgrove, D. A. Newbery, E. G. Smallbone; (Mr. Bromley) Messrs. V. C. Benson, R. C. May, A. Simpson Smith, F. Widlake; (Mr. Slesinger) Messrs. W. A. A. Collington, A. H. B. Heesom, C. A. N. Hicks, S. M. Reeders.

Senior Dressers.—(Sir Alfred Fripp) Messrs. I. M. Benjamin, R. W. Edwards, F. C. Miller, H. Moore, C. L. Worthington, H. P. Yew; (Mr. Steward) Messrs. H. N. Collier, G. Davies, H. E. Filmer, G. R. Ford, H. Van Post, W. G. Sears; (Mr. Fagge) Messrs. N. F. C. Burgess, A. V. Clemmey, J. Gray, C. H. Highfield, H. Kessel, J. A. Mekelburg; (Mr. Rowlands) Messrs. M. McC. Haird, L. J. Barford, H. E. Harding, J. R. B. Hern, J. W. Schollum, H. G. Wimbush.

"B" Dressers.—(Sir Alfred Fripp) Messrs. R. W. Cunningham, B. M. Francis, J. L. Groom, L. E. Houghton; (Mr. Steward) Messrs. M. T. Aung, C. L. Frochlich, J. Maingard; (Mr. Fagge) Messrs. D. C. Drake, A. E. Hill, A. C. Taylor; (Mr. Rowlands) Messrs. E. Bowen Jones, W. B. Norcott, S. R. G. Pimm.

Obstetric Dressers.—(Mr. Bellingham Smith) Messrs. N. A. Arnold, L. Bechal, P. C. Cumber, A. A. Dalby, J. Dywien, M. M. El Mishad, R. H. El Sawy, B. E. Hawkins, J. L. Hopkins, F. H. K. Knight, D. M. Lang, D. R. Martin, R. A. Norman, F. W. Schofield, H. J. Selby, T. St. J. Silvester, D. A. Skan, H. H. Steadman, W. K. Targett, J. G. S. Thomas; (Mr. Chapple) Messrs. S. Borman, R. N. Brandwood, S. Cieman, D. F. Durward, A. Elliott, V. L. Fisher, D. R. Grant, A. C. Hampson, J. U. Human, M. E. M. Jago, T. M. Kellough, J. N. D. O'Rafferty, A. B. Plant, J. R. Ratcliffe, L. Rhys-Jones, A. W. Riddolls, J. W. Shackle, H. Trafford, T. I. Williams, F. A. Wilson.

Dressers in the Eye, Ear, Nose, and Throat Dept.—

Ophthalmology.—(Mr. Eason) Messrs. P. R. T. Becker, F. R. Dingle, A. I. Jewell, O. F. A. Krause, R. Schofield, E. Serabjee; (Mr. Ormond) Messrs. R. A. Dyke, A. H. Jewell, S. A. Leader, F. M. Newnham, M. Rubinstein, H. Levit.

Laryngology.—(Mr. Mollison) Messrs. A. S. M. Douglas, C. K. Colwill, L. W. Houghton, G. S. Landon, J. J. Lewinstein, B. G. Scholefield, J. C. Young; (Mr. Layton) Messrs. R. J. Cann, A. T. Fripp, W. A. Mill, W. F. Payne, R. L. Waterfield, F. Marsh, F. J. Levy.

Clerks in the Children's Department.—Messrs. H. M. H. Ashwin, P. C. Bennison, H. E. Blake, J. H. Broadhead, M. F. Butler, A. H. Brockbank, Ll. Davies, S. C. M. Davison, C. J. Dobbin, S. F. Durrans, M. M. El Mishad, T. M. Fripp, H. J. Fuller, D. R. Grant, D. S. Huskisson, D. F. Johnstone, R. M. Jones, J. G. Kingsbury, H. C. Lee, H. Lewis, R. R. Mackenzie, G. A. Martin, S. P. Meacock, W. J. Montague, C. F. Morrison, G. W. Murray, R. G. Nethery, J. E. Piercy, G. H. Pitt, W. G. Roberts, W. F. Roper, J. Sellick, P. B. Skeels, I. P. Spurrell, J. D. S. Thomas, P. G. Trafford, L. A. S. Trott, T. G. Tresidder, J. M. Van Schalkwijk, C. H. C. White, H. K. Williams, R. G. Williams, H. M. Worth.

Clerks and Dressers in Special Departments.—

Genito-Urinary Department.—Messrs. L. W. Cann, H. G. Close, J. C. G. Dickinson, P. A. Dyke, J. C. Hewetson, J. J. Laws, F. Martin, T. G. W. Parry, M. B. Seng, C. H. C. Toussaint.

Dermatological Department.—Messrs. H. M. H. Ashwin, P. C. Bennison, H. E. Blake, M. F. Butler, P. S. Court, Ll. Davies, S. C. M. Davison, C. J. Dobbin, S. F. Durrans, T. M. Fripp, H. J. Fuller, D. S. Huskisson, D. F. Johnstone, R. M. Jones, J. G. Kingsbury, H. C. Lee, H. Lewis, R. R. Mackenzie, G. A. Martin, S. P. Meacock, C. F. Morrison, G. W. Murray, G. W. Nethery, J. E. Piercy, G. H. Pitt, W. G. Roberts, J. Sellick, P. B. Skeels, I. P. Spurrell, J. D. S. Thomas, L. A. S. Trott, J. M. Van Schalkwijk, H. C. Warner, E. C. Warner, H. K. Williams, R. G. Williams.

Fracture Department.—Messrs. W. H. Bradfield, A. Canard, G. K. Colwill, M. H. Jacobs, D. F. Johnstone, J. G. Kingsbury, S. A. Leader, G. A. Martin, J. M. Van Schalkwijk.

Neurological Department.—Messrs. J. Atkin, A. Canard, H. G. Close, A. S. M. Douglas, R. B. Fawkes, H. J. Fuller, M. H. Jacobs, S. P. Jacobson, N. W. McKeith, E. I. Liberman, M. B. Seng, J. L. L. Walker, E. C. Warner, H. J. W. J. Westlake.

Orthopædic Department.—Messrs. W. H. Bradley, P. S. Court, R. B. Fawkes, H. N. Hearle, W. S. Hunt, S. P. Jacobson, E. I. Liberman, R. D. Owen, K. O. Parsons, W. R. Spurrell, H. C. Warner, H. J. W. J. Westlake.

The following have been appointed to the Central London Ear, Nose, and Throat Hospital, Gray's Inn Road, W.C.—Messrs. A. Canard, L. F. Davies, E. F. Hewlitt, E. I. Liberman, R. D. Owen, A. Tom, E. C. Seward, R. E. Robinson.

Clinical Assistants.—Messrs. T. S. Blacklidge, G. T. Henderson, R. E. Lane, G. C. Millis, P. McG. Moffat, E. E. Neser.

"What I Think of Men."

By "JUNIOR PRO."

The Editor has asked me to write a short article on what I think of men. This has caused me a considerable amount of trouble, as usually I do not think of them at all; and I am not certain that the subject is worthy of much consideration.

Every woman has an ideal man, more often in fancy than in fact, and I am no exception to this rule. A man, to my way of thinking, should be strong, brave, silent, and thoughtful for others, but it is not of such a mythical creature that I shall write. My study will be drawn from among the ward-clerks, dressers, and house-officers of the hospital, who are so liable to trip over me without seeing me or who try to flirt with me with so little success. These men, with very few exceptions, are innocent of any of the virtues that I have described. Strong! My goodness! Have you ever seen a ward-clerk lifting a patient from the theatre trolley back into bed? Very few ward-clerks seem able to lift one above the iron bar at the foot of the bed. Brave! To read of their exploits in the football field one would have thought that the students here were descended from the prophet Daniel, Cyrano-de-Bergerac and Joan of Arc. Yet, see them attending the surgeon on his round. If spoken to directly they look sheepish, if asked a question they look goatish, and, if they answer, they sound hoarse. This spirit of self-abnegation is only noticeable in the presence of senior men. Before those, who know even less than themselves, a student will pretend to a knowledge that never deceives us nurses. They will even be ponderous or "heavy" and order us about, as though our one object in life was to look after them and to be grateful for the condescension of being noticed. We do help them, and we cover their mistakes, but that is through pride of our wards and not as a return for the charm of manner of the men. Silent! They are as silent as a thunderstorm, as noiseless as a ward-trolley.

The "take-in" firm gives nothing to a troop of cavalry in noise when it comes to the ward during the night. The clerks, like the cavalry horses, are apparently shod with iron, and their voices ring out crisp and clear like so many cavalry sergeants. Theatre boxes bang on to the ground, the patient is hurled on to his bed, someone invariably calls out "touched down," and they all laugh uproariously. Yet, in broad daylight, when all the patients are awake, but the surgeon is doing a round, they creep in on tip-toe and look as though they would like to crawl under a bed to escape observation.

Lastly, thoughtful! Aren't they just! Which of them has ever thought of the effect on a nervous patient, waiting to undergo an operation, of seeing three or four figures enter the ward, dressed in white, and wearing caps and masks for all the world like members of the Klu-Klux-Klan? Not one of them. They have grown so accustomed to their operating kit that they forget what a terrifying effect it may have on nervous women and tiny children. In the same way, taking a patient straight into the theatre and letting her lie on the table while white-robed, tobacco-scented dressers rattle knives and forceps in preparing for her operation, is little short of cruelty to animals.

I am enabled to write these sincere, but heretical, remarks owing to the Editor's promise that my nom-de-plume will be respected, and I do not write them unkindly. It is well to be reminded of one's faults even if one has passed the Second M.B. Sister never lets me remain in ignorance of mine for more than a few minutes, and when I repeat them she comes down on me like a ton of hot bricks; and yet I prefer her to the men. All the same we should be dull without them; there is so little else to laugh at over our mid-day tea. The luckiest nurses, I always think, are the head nurses on night-duty. Their's is the satisfaction of listening to the words of wisdom of the newly-qualified men and of standing respectfully while they give orders or indulge in light conversation. I have only once had that experience, in an emergency, and how I did enjoy it. I loved to compare and classify the different house-officers. The older and more blasé ones would walk up to the fire, sit down and commence to write without a word of greeting, accepting such little attentions as clearing a chair for them as a matter of course. They would then ask for a cup of tea or hot milk and discuss themselves. Then they would try to obtain the latest hospital scandal and graciously accept some chocolates. I never would tell them anything that was true, but sometimes invented things, which they swallowed with avidity. Others would try, and

not always as though it were for the first time, to become affectionate.

But the funniest of all were the A.H.-S.'s. Newly-acquired responsibility rarely rests upon a man with dignity, and so jealous are newly-appointed house-officers of their responsible position that their manner too often becomes ludicrous. They are sometimes as fussy and petty as a night sister. Their tone is lordly and domineering, and they check the nepenthe to a fraction of a minim.

But God bless them all. They do their best and mean well, and, after all, most of them have still to grow up.

Reviews.

The Nursing of Surgical Tuberculosis in Children. By Janet P. Robertson. (The Scientific Press, London.) Price 3s. net.

This little book, written for nurses by the Matron of the Treloar Cripples' Hospital at Alton, and with a foreword by Sir Henry Gauvain, describes the details of nursing employed at the Hospital. Chapters are given on hip-joint disease, spinal caries, heliotherapy, splints, education, diet, and after care, and the value of the book is greatly increased by the inclusion of thirty excellent illustrations, showing, among other things, the methods of making plaster and celluloid jackets. It is a book which will be of great interest to nurses and to those students who have not had the opportunity of paying a personal visit to Alton.

A Manual of Histology. By Prof. V. H. Mottram. (Messrs. Methuen & Co.) Price 14s. net.

It is a long time since we have come across a book which is so deserving of popularity as is this one. It is essentially written for the junior student of physiology, and in a manner which shows that the author fully appreciates the difficulties of histology for the beginner.

The subject matter is written in a clear style, beginning with a study of cells and tissues, leading to the study of various organs.

But it is the diagrams which are especially worthy of praise. They are of large size, are all drawn as sketched from the actual histological preparations, and each component is labelled so that the student knows exactly what to look for in his own preparations. All are without colour, but this is no disadvantage when they are so clearly set out. Almost every fact in the book is demonstrated by a diagram.

In a first edition, as would be expected, there are a few minor errors. The most outstanding is in Fig. 119, in which the blood supply and the secreting apparatus of the kidney are not drawn in their natural proportions.

It is a pity that such a valuable book has been made so large, and cumbersome, owing to the very large type used.

We hope this work will be brought prominently to the notice of every student, for once this is done we feel sure it will be appreciated.

Tubercle: A Monthly Journal Devoted to All Aspects of Tuberculosis. (Messrs. John Bale, Sons & Danielsson, Ltd., 83--91, Great Titchfield Street, London, W.1.) Price 2s. 6d. net, 25s. per annum, post free.

The Surgery of the Lungs and Pleuræ.—Realising the importance of the recent advances in the surgery of the lungs and pleuræ, the editorial staff of "Tubercle" have devoted the October number—the first of the new volume—of this journal to this subject. This special number contains an original article by H. Morriston Davies, M.D., M.Ch.Cantab., F.R.C.S.Eng., on The Progress of Surgery of the Lungs and Cavity.

Another original article by L. W. Shelly, M.C., B.C.Cantab., M.R.C.S., L.R.C.P., is concerned with Anæsthesia in Thoracic Surgery.

A bibliography has been compiled of the articles on chest surgery published during and after 1920. Appended to this bibliography is a list of recent books on chest surgery, and it is significant of the amount of work done in this field that these references occupy between five and six pages.

The statistical section of this number of "Tubercle" deals with Thoracic Suppuration and New Growths and include Mortality Statistics for England and Wales.

Under the heading "Book Notices and Abstracts," there is a long review of an article by Prof. L. Brauer, of Hamburg, on Thoracoplasty.

Other reviews on this subject are of recent articles by Dr. P. K. Brown, Dr. L. Elsesser, Prof. P. Bull, Prof. H. J. Jacobæus and Dr. E. Kay.

The subject of Empyema is reviewed in a separate section, the work of recent writers on this subject being analysed.

There is included also an account of the operative treatment of thoracic tumours and of lung suppuration and gangrene.

The Future of Thoracic Surgery is discussed in an editorial review, and there follows the monthly bibliography of recent articles on every aspect of tuberculosis.

Guy's Hospital Christian Union.

The first meeting of the session, mainly for Freshmen, was held in the College Smoking Room on Monday, October 8th, some thirty men being present.

After tea, the chairman (Dr. Campbell) having welcomed the Freshmen, introduced Dr. Alex. Wood, of Emmanuel College, Cambridge, who is well known to those of us who have attended Student Christian Movement Conferences at Swanwick. Dr. Wood spoke of the work of the Christian Union, and was intensely interesting and illuminating. He pointed out that joining the Christian Union did not mean acceptance of dogmas, but showed a desire to understand the Christian faith and to live the Christian life. We have in the Christian Union an opportunity for going into and discussing Christ's Teaching, and for forming conclusions about it. He stressed, as the Chairman had done, the importance of clear thinking in religious matters.

The Student President (E. H. Roche) then spoke of the coming activities of the Union, especially the Study Circle, which is to meet on alternate Mondays in the Chaplain's Room.

The meeting closed with hearty votes of thanks to Dr. Wood and Dr. Campbell.

C. W. MARSHALL,
Hon. Sec.

Fencing.

The call to arms in the last GAZETTE has met with the most whole-hearted support. At one time during the second evening of the season, twenty-three rapiers were being brandished, eight being real ones and the rest imaginary. This was owing to the unexpected rush of beginners to learn the noble art of fence. Next Monday there will be enough weapons for all. More supporters of the cause are still needed to ensure a really good team. Very few, five at the outside, can be said to have a good chance of being included in the team, the other places are open to anyone, who will tackle the pastime with energy and enthusiasm.

There are three weapons for which men are needed —foil, epée and sabre. A full team will consist of fifteen men, and, with the above exceptions, the team will be selected from men who are absolutely novices. Do not be afraid to come because you have never fenced before. We are all starting level, and if we put our backs into it by Christmas we shall be able to challenge the Ladies of Charing Cross Hospital.

Rugby Football.

GUY'S v. COVENTRY.

On Saturday, September 29th, Guy's journeyed down to Coventry with a good team, but not quite good enough to win. H. Graham-Davies and E. E. Neser were unable to go, but F. Bekker went to lend his valuable assistance, in the unusual position for him, of a member of the pack. The game was not very interesting because of the enormous number of penalty kicks; it was from one that W. Badenhorst kicked a penalty goal, thus scoring for us the only points we could claim. At half time this was the margin of our lead.

After half-time the penalty kicks came fast and furious. One does not like to find fault with the referee; one must, however, feel sorry for his whistle, the instrument never had a minute's rest, and became indeed an instrument of torture to players, and, one fears, to the majority of the thousands of spectators who lined the playing field. J. Morton, the Coventry full back, landed a good long range penalty goal for his side, and when everything pointed to a drawn game, Morriss of Coventry ran in with an unconverted try. We lost, therefore, 6 points to 3.

One cannot detail the game. Our threes could not penetrate a strong defence and our forwards fell away during the second half. One felt a little dissatisfied at the result, but only those present can judge how difficult it was for our fellows to settle down to their proper game.

Guy's Team.—W. Badenhorst, J. W. Finnemore, G. Fellowes-Smith, C. L. Steyn, G. R. Mostert, W. Meissner, J. G. Van Schalkwijk, N. M. Holloway, B. G. Scholefield, F. Bekker, P. J. du Toit, G. G. T. Tregarthen, H. de Wet Vorster, J. W. Schabort, E. W. Hutchinson.

GUY'S v. UNITED SERVICES.

There is nothing so hard as writing a report of interest about a match that is drawn pointless, but not only was the 1st XV. match on October 6th so ended, the 2nd XV. followed suit, thus establishing what is, one thinks, a record in our Hospital Football.

The team that journeyed to Portsmouth was practically the same as played Coventry, except that Scholefield was not playing, while Cameron lent his assistance for the first time.

As far as the game went it was really a battle between the forwards, with the Services pack getting possession more often than our fellows. Very quickly our men broke away and in defence no fault could be found. The point to be thought over is, had the eight been rather more solid and pushed harder, would not our attack have had more chance? Meissner was quite the match of Chevallier, but the latter had the advantage in playing behind a harder trained eight.

One must congratulate the threequarters and Badenhorst in keeping their line intact. Many and severe were the attempts to cross it, but all successfully repelled. Notwithstanding all that is being written, the Guy's eight is improving match by match, and by the time we reach the Bristol match, providing all keep sound, a solid eight will be welded into a useful forward combination. A word is due to Mostert in praise of his efforts to get past Stephenson and to Van Schalkwijk for his many good pieces of work with head, foot and hand. The result of the match was a clean score sheet.

Guy's Team.—W. Badenhorst, G. R. Mostert, C. L. Steyn, H. Graham-Davies, J. W. Finnemore, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, G. C. Cameron, F. Bekker, G. G. T. Tregarthen, E. W. Hutchinson, H. de Wet Vorster, J. W. Schabort.

SPECIALITIES.

"Mellin's Food."

MELLIN'S FOOD, Ltd., Stafford Street, Peckham, S.E. 15.

Mellin's Food is a valuable Food for infants, containing, as it does, wheat and malted barley, the starch of both being converted into carbohydrates, which with natural lime and phosphate salts, ensures the development of strong bones and teeth in the infant.

It also softens and breaks down the curd in milk, thus making it easily digested.

"Mellin's Food" can be adapted to suit the requirements of infants from birth up to all ages, and careful directions as to the mixing and quantity required are supplied with each tin.

It is of value to Nursing Mothers, as it nourishes and sustains them while adding to the richness and quality of their milk.

Mellin's Food has proved its efficiency by holding its own in spite of the many newer and much advertised productions.

Guy's Hospital Club's Union.

At a recent meeting of the Clubs' Union Council the following Officers were elected:—

President.—John Fawcett, M.D., F.R.C.P.

Chairman.—T. B. Johnston, M.B., Ch.B.

H. S. French, C.B.E., M.D.; C. H. Fagge, M.S.; J. A. Ryle, M.D.; G. H. Hunt, M.D.; G. D. Shaw, W. H. Foy; N. L. Lloyd; S. P. Meacock, P. P. Skeels; J. A. Currie.

Hon. Treasurer.—W. Kelsey Fry, M.C., L.D.S.

Hon. Secretary.—N. L. Lloyd.

Assistant Secretary.—W. H. Foy.

Auditors of Constituent Institution Accounts.—W. H. Foy and P. B. Skeels.

Papers by Guy's Men.

Grant Massie, M.B., B.S., F.R.C.S. Traumatic Intestinal Rupture.—*Lancet*, 1923, ii., 640.

Norman Burgess, B.A., J. M. H. Campbell, M.D., M.R.C.P., A. A. Osman, M.R.C.S., W. W. Payne, M.B., B.S., M.R.C.S., and E. P. Poulton, M.B., F.R.C.P. Early Experiences with Insulin in the Treatment of Diabetes Mellitus.—*Lancet*, 1923, ii., 777.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

ON Thursday, October 18th, the Inaugural Meeting of the Pupils' Physical Society was held, when Sir William Arbuthnot Lane, whose address we print on page 428, was granted an enthusiastic reception by the members present. It is not often that the students as a body have the opportunity of listening to those who have done such wonderful works for humanity and added so greatly to the lustre of the Hospital. At odd times there are functions and special occasions when one can catch a glimpse of those who have left us to join the Consulting Staff. These, however, are mere glimpses; but to listen once again to those who used to teach here in days gone by is a pleasure which we only wish could be more frequent.

At the close of the address, the President, Sir William Hale-White, proposed a vote of thanks to Sir Arbuthnot Lane and recounted many of the great discoveries and advances which the latter had conferred upon Surgery. The vote was ably seconded by Dr. A. H. B. Kirkman, an old House Officer to Sir Arbuthnot Lane, and was warmly received by the meeting.

We congratulate the Physical Society on such a good beginning to its new season and we trust that the future meetings will all meet with as great a success. We cannot urge too strongly upon students the advantages which are to be gained from attending the meetings of this Society. The problems presented by Medicine, in its various aspects, are legion and here there is ample scope for any student to take his small share in their elucidation. No opportunity should be lost of being present, and, if possible, of taking part in the discussions of the Society.

ON Wednesday, October 17th, the Biennial Dinner was held at the Connaught Rooms with Mr. G. Bellingham-Smith in the Chair. It falls to the lot of very few men to arrange and carry through a dinner, attended by nearly four hundred guests, and Mr. Ormond must have felt justifiably proud at the success of this record gathering. In the reception-room everyone was reviving old friendships and the hum of conversation kept time to the refrain of "Do you remember. . . ." Even we, who are still at the Hospital, shook hands warmly with our Registrar and called to mind the early twenties. It was a wonderful gathering of men, drawn together by a common love of Guy's, and the spirit of the evening was personified in the presence of John Dixon, who at the age of ninety-two attended the dinner to meet men who were still in the nursery when he qualified. When John Dixon was at Guy's, St. Thomas' Hospital was in St. Thomas Street, Hunt's House had not been built and, glorious thought, there was no Conjoint Board. He took his M.D. (St. Andrew's) in 1854 and the Conjoint seven years later. May he live to grace many more biennial boards.

During the long and excellent dinner, a string band acted as a carminative and the toasts were submitted without speeches. This enabled the coffee to be served by half-past

nine, and left a long evening for the diners to hunt out old friends and relive the wild days of their apprenticeship. That these biennial festivals will continue to grow and flourish is certain and as long as there is so capable an Honorary Secretary in charge their success is assured.

ONE of our correspondents in this issue writes on a subject, the present medical curriculum, which is greatly to the fore at the present time. He is himself a general practitioner and expresses a fear that the ever increasing curriculum, which a medical student is forced to digest, will lead that much harassed individual to become efficient in all kinds of 'ologies to the detriment of the practical points which are so necessary in general practice. It is not difficult to understand the fear to which a cursory glance at the curriculum may give rise. In view of the vast problems in medicine which still remain to be solved one might almost say that this science has hardly passed out of its infancy. With what ridicule do we regard the methods in use even a hundred years ago? Similarly, it is interesting to conjecture as to the opinions of the next century on the methods of to-day. Even at the present time the whole aspect of medicine is changing to give effect to the old proverb: "Prevention is better than cure." So as each fresh problem is solved another small addition will be made to the curriculum and it is difficult to see how it will end. The Conjoint Board have just increased the minimum time limit of the curriculum to six years. Perhaps in ten years time another period of a year will be added. So we will go on, and perhaps, if Bernard Shaw is still with us, he may be induced to present an edition of "Back to Aristotle," featuring Tom Smith, the medical student of the future, aged 60, about to enter general practice having just run through the curriculum of the day! Not that the problem will grow to such an extent, but we feel that a halt will have to be made somewhere in the near future. A vital aspect of the problem is that as long as a student remains unqualified his earning capacity will be nil, and, if this period is increased much further, economy, unless a fresh source of help be forthcoming, will put a stop to many aspirations in the way of medicine. This is a side which up to the present has not met with much attention. Its study and solution would go far to relieve the anxieties of many, especially the parents of future students.

We have already mentioned the fear expressed by our correspondent as to the neglect of practical points in a student's course. Here we are forced to disagree with him, not in toto, but as far as Guy's is concerned. During the past year or two we have had occasion to meet with students from most of the other London Hospitals. The comparison between the work of a student at Guy's and at the other Hospitals has been an interesting one. From what we have learnt we can state with confidence that at no other London Hospital is the student granted so many opportunities for the acquisition of practical knowledge as he is at Guy's. Practical experience has always been the mainstay in the medical training at Guy's and if this is not acquired it is in no way the fault of the curriculum, together with all its 'ologies, nor of the Medical School and the various teachers, but rather of the student who does not take the trouble to use the opportunities afforded him.

This leads us to put forward a plea for the extension of one of our main departments. During the past few years the whole aspect of the Hospital has been changed by the birth of new buildings in various situations. The latest has been the new extension to the Medical School. This process has left the old dissecting room vacant and one naturally wonders what the ultimate fate of this site is to be. Up to the present we have heard no rumours as to its future use, and therefore we offer no apologies for the following suggestion. Rather do we hope that in the near future we may see our anticipations assume a concrete form in more senses than one. As we have said the practical opportunities accorded to the Guy's student are innumerable. Yet there

is, to our mind, one department in which these could be materially increased. It is a curious fact, and we believe a true one, that most students and many physicians and surgeons tend to regard Midwifery and Gynæcology as subjects of minor importance in comparison to Medicine and Surgery.

It is interesting to recall the words of Dr. Comyns Berkeley in his recent address to the Section of Obstetrics and Gynæcology of The British Medical Association:—

"The majority of students, when they get into practice are not going to operate, and yet, before they can sit for their final examination, they have to spend three months in the out-patient and six months in the in-patient surgical departments of their hospital, working under the direct supervision of the chiefs of these departments. The majority of students, however, are going to practise midwifery, and yet many of the examining bodies do not compel them to attend any midwifery cases in a hospital, and there is no rule that any of the twenty women they must deliver shall be delivered under the immediate supervision of the chief of the department. Not many years ago the obstetric house-surgeon used to take the pupil to his first two cases only, and he had to look after the remaining eighteen as best he could. Until lately it could be said without exaggeration that most men went into practice without ever having seen a woman delivered as she should be—that is, in suitable surroundings.

"The life or health of a patient may easily depend on the good or bad judgement of the medical attendant, and often does. In no instance, perhaps, is this fact more striking than in the practice of midwifery. It is recognised that the only way in which students can attain good judgement is by being given efficient teaching and ample opportunity in practical work, but whereas both efficient teaching and ample opportunity are always within the reach of every student when he is studying medicine and surgery, when he comes to study midwifery his opportunities for practical work under supervision are extremely limited."

It is far from our intention to state that the teaching of midwifery at Guy's is bad. The wonderful results in the recent examinations show only too plainly that the contrary is the case. Rather we would say that the utmost use is made of existing facilities and it is for an increase of these that we put forward a plea. We feel that a vast and far-reaching improvement could be made by erecting, on the site of the old dissecting room, a new obstetrical and gynæcological block. If, in such a building, one or even two wards could be devoted to normal midwifery cases, the facility, at present lacking, could be afforded to every student of seeing "a woman delivered as she should be—that is, in suitable surroundings." At the present time before his appointment as extern no student has the opportunity of seeing a normal delivery unless he accompanies an extern to one of his cases. It would we think be far better if facilities could be afforded for gaining this experience *under expert supervision* before the appointment of extern was undertaken.

In the new building to which we have referred we suggest there should also be incorporated a fresh Salomons' Centre, a new gynæcological out-patient department, and the children's wards. All these departments are intimately connected with midwifery and gynæcology and a great advance would be made if they could all be grouped together in one building.

In the existing out-patient departments there also seems to be an urgent need for greater accommodation. Such a scheme as we have outlined would leave the present Salomons' Centre and Gynæcological Out-Patient Departments as free space to enlarge some of the other O.P. Departments, or for use as new departments. It would also enable further use to be made of Queen and Victoria Wards.

At first sight we may appear optimistic in putting forward such a suggestion, and the scheme itself may appear grandiose but minus a large sum of money! However, a glance at certain new buildings in Gower Street will show only too well what can be accomplished if adequate plans are prepared beforehand.

Obstetrics and gynæcology are vital subjects to the majority of students and to the community in general. We trust that our plea will meet with approval and that we may soon see an effort made to increase our facilities still further and even surpass those to be had at other institutions.

Chronic Intestinal Stasis and Cancer.

An Address read before the Inaugural Meeting of the Pupils' Physical Society by SIR W. ARBUTHNOT LANE, BART., M.S., F.R.C.S., Surgeon to Guy's Hospital.

At present surgery and medicine appear to be one horrible mêlée of attempts to understand and treat end results, little or no endeavour being made to obviate the development of these conditions. In surgery operations increasing in severity replace less extensive procedures; for example, in such a condition as ulcer of the stomach, while no attempt is made to remove the factors which produce it together with many necessarily associated results, the possibility of the recurrence of the ulcer is only eliminated by the removal of the entire organ. The safety with which such operations can be performed and the facility with which a surgeon can acquire sufficient skill to effect them at comparatively little risk, tend to increase the number and severity of these operations. Everyone worships the god "technique" to the complete elimination of the importance of dealing with the causation, and therefore the prevention of disease, which should be our real object in life.

The profession is only just beginning to realise the enormous part played by the defective functioning of the gastro-intestinal tract, the consequent fouling of the food supply and the poisoning and deterioration of the tissues by septic material absorbed from the intestine.

DIET OF CIVILISED AND UNCIVILISED.

That we pay dearly for the luxury we enjoy in our food and habits of life is shown clearly by the fact that civilisation brings in its train a very large number of diseased conditions which do not exist in those leading the simple life of the native. That these conditions are all due to acquired defects in the functioning of the gastro-intestinal tract is, in my opinion, undoubted, since they occur at once in the native when he is placed in a civilised community, and it can be shown that these diseases bear a direct proportion to the degree of civilisation enjoyed.

Roughly the difference between the civilised and the uncivilised is a matter of diet. While the latter eat much food that is uncooked or only imperfectly cooked and which contains a large proportion of indigestible matter, the former eliminate from their meals all but the digestible. By this means the bulk of the food and its stimulating action on the intestinal wall are diminished as much as possible and the material stagnates and becomes poisonous. As evidence of these statements I will quote an extract from a lecture by a great observer, Colonel McCarrison. He spent nine years in the Himalayas, during which time he had a large practice, performing more than 400 capital operations each year. During that time he never saw one case of asthenic dyspepsia, of gastric or duodenal ulcer, of appendicitis, of mucous colitis or of cancer. I would call your attention to this sequence, all of which are the sequelæ of chronic intestinal stasis, since I am certain that cancer is the last stage in the sequence and that it never attacks a healthy organ. The diet of these people is very simple. They live chiefly on corn ground between stones. This is made into a cake which is imperfectly roasted over a charcoal fire. They rarely eat meat. Mr. F. L. Hoffman, the eminent American consulting statistician, writes me as follows: "Your views regarding dietary or nutritional causation (of cancer) coincide with my own based upon extensive research among native races. I recently returned from a trip to South America, where I lived for seven months among native Indians and mixed bloods. During the entire period not a single case of cancer was brought to my attention, although everywhere I inquired, although every doctor was asked the question, and although I personally came in contact with more than 2,000 natives. The diet is very simple, and the habits of the people are very regular."

Dr. F. P. Fouche, writing in the *British Medical Journal*, June 30, 1923: "For six and a half years I was district surgeon in the Orange Free State. During the whole of that period I never saw a single case of gastric or duodenal ulcer, colitis, appendicitis, or cancer in any form in a native, although these diseases were frequently seen amongst the white or European population."

Dr. Bernard Hollander, writing in the *British Medical Journal*, July 7, 1923: "Thirty years ago I was interested in the causation of cancer when my friend, the late Sir Henry Stanley, the African explorer, drew my attention to the fact he had observed that the native races

through which he had travelled were free from it. Only in coast towns, where natives mingled with Europeans, did cancer occur, then only one case in about ten or twelve years."

Dr. Dyce Sharp, writing in the *British Medical Journal*, July 14, 1923, confirms these statements as regards Northern Nigeria and Abyssinia.

I could furnish much more evidence showing that the freedom from any of the stasis sequence is due chiefly to diet, and to a lesser degree to the habits of these races.

Place these people in a civilised community as in the case of the American negro when the diseases they suffer from are precisely those of the white man among whom they live and whose diet and habits they imitate.

Diet and Cancer.

I think I have proved that the primitive races while living in their normal conditions and surroundings are free from certain diseases of the gastro-intestinal tract and from cancer, all of which exist widely in civilisation and are apparently becoming more and more frequent. This is so obvious in the case of cancer that much attention has been drawn to this particular stage of the stasis sequence, and an enormous amount of money and time have been spent in endeavouring to find the origin of cancer. The chief cause of the failure of these efforts is due to the fact that cancer is not recognised as a part of a mechanical sequence, and as never affecting a healthy organ, but is regarded as a primary condition. The cancerous cell will only grow in a suitable soil, and that soil is provided for by the prolonged action of toxins in the tissues.

I will now proceed to the description of the condition I called chronic intestinal stasis and will endeavour to show how it runs parallel with civilisation, producing hideous misery and disease in a progressive and disastrous manner.

Many years ago while walking over a bridge in Paris with my old friend Moynihan, he said to me, "You have completed your work on the treatment of fractures, why do you not turn your attention to the abdomen?" That remark sank into my brain and I went up to Leeds and saw the magnificent work he was doing in the School on which Mayo Robson had shed so much lustre.

On my return to London I applied to the gastro-intestinal tract the same mechanical principles which I had formulated from the study of the changes which ensue in the bodies of labourers and which I had employed in the treatment of fractures. They are the following:—

(1) Pressure produces changes in the structure and form of the bones and in the form and function of existing joints, while it determines the formation of new joints.

(2) Strain produces change in the form of bones, and in the form of existing joints and also produces new joints.

(3) When, apart from the exercise of pressure or strain, it is important, from the altered mechanical relationship of the individual to his surroundings, that a mechanism should be modified or an entirely new one developed, such a change takes place.

Its Mechanical Effects.

These laws show that we have a definite mechanical relationship to our surroundings and that any variation in that relationship is followed by corresponding changes in our mechanism. In other words, this is the basis of evolution. Realising the fact that civilisation, because of the variation from the diet and habits of primitive man, meant constipation or the delay in the passage of material through the gastro-intestinal tract, I argued as to what changes would develop in the viscera and in their attachment in order to obviate as far as possible the ill effects which must otherwise ensue from the stagnation of the contents of this tract.

In the case of the large intestine, to oppose the elongation and distension of the bowel it would be advantageous to strengthen the layers of peritoneum which secure the gut to the abdominal wall.

It is the habit of civilisation to regard a single formed motion a day as the normal so that the individual is habitually constipated for at least twenty-four hours, and the products of the food consumed during that period are accumulated in the large intestine and in the first instance in its termination. Therefore strain is experienced first upon the outer layer of the mesentery which fixes the iliac colon to the floor of the fossa, and this strain is greatest about the junction of the iliac and pelvic segments of the colon.

Corresponding exactly to this strain there is developed upon the outer surface of the mesentery extending from its base, streaks or bands of peritoneum, fibrous in appearance. These spread gradually along its outer aspect, and as they grow they contract and shorten this portion of the mesentery, so limiting the range of movement of the segment of intestine which it secures. Later this new growth of tissue which is the crystallisation of lines of force, extends to the outer wall of the large bowel, and gradually encroaches on its circumference. Not only does it pin the intestine immovably in the fossa, but by its progressive attachment to the bowel wall it rotates it upon its long axis and reduces its lumen very materially, and consequently obstructs the passage of fæcal matter through it. The consistence of the contents of this portion of the intestine is usually firm and often hard, so that it is easy to realise how difficult it may be for the fæcal mass to negotiate this obstruction, even when it exists only in a moderate degree. Any interference with the free functioning of this portion of the bowel is a serious obstacle to efficient drainage, and the more marked the obstruction the greater the delay of material in the entire gastro-intestinal tract proximal to it.

To this particular obstruction I gave the name of the "*First and Last Kink*," the *first* because it is the earliest to form, and the *last* because it is the lowest in the gastro-intestinal tract.

I cannot exaggerate its importance as I believe its capacity for harm is tremendous and far-reaching, and that it is responsible for all the changes which are due directly and indirectly to Chronic Intestinal Stasis. It spells the failure of civilisation and is a veritable Pandora's box.

Consequent on the stagnation of material in the large bowel similar bands develop along the mesentery securing the convexity of the loaded colon. These are most marked in certain situations, such as the splenic flexure, and again at the end of the ileum where it is called the ileal kink. The secondary accumulation of material in the small intestine angulates the duodeno-jejunal junction causing first dilatation of the duodenum, and later ulceration of its first portion, spasm of the pylorus, dilation of the stomach and its ulceration along the seat of strain, namely, the lesser curvature. The ulceration of the stomach tends readily to become cancerous.

The same tendency to the development of cancer occurs in the large bowel where angulated and obstructed by acquired bands or by spasmodic action of the sphincter ani or of Mayo's circular band of muscle, in direct proportion to the degree of obstruction and to the increase in consistence of the fæces. The stagnation of the contents of the large bowel also causes an inflammation of the appendix which is frequently anchored and obstructed by acquired adhesions of the mucous membrane of the colon producing colitis in its various degrees and forms. The appendix is often so secured as to control the ileal effluent and to increase the stagnation of the material in the small intestine.

Its Toxæmic Results.

Besides these mechanical results of stasis the sequence of which is quite obvious, we have those which are consequent on the fouling by organisms of the dammed-up contents of the small intestine, duodenum and even the stomach, with the extension of the infection along the hepatic and pancreatic ducts which produces gall stones and cancer. The mode of extension of the infection in these is as apparent as the mechanical changes.

The next series of changes we have to consider are those which come about by the absorption from the infected contents of the gastro-intestinal tract of more toxins, etc., than the liver is able to deal with. These noxious substances getting into the circulation are carried to every organ and tissue in the body and produce disastrous results in proportion to the degree of the toxicity of the blood.

The degenerative changes in the thyroid, adrenal and other ductless glands, the heart and blood-vessels, the nervous system, the eyes and ears, the kidneys, liver, pancreas, uterus, ovaries, testes, prostate, breast, fat, skin, hair, lymphatic tissue of the naso-pharynx and the gums and teeth—these two last being the most frequent and conspicuous of all—I have frequently described in detail, and I have shown how liable certain of these degenerated organs, as the breast, uterus, ovary and pancreas, are to be infected with cancer.

Among the nervous symptoms may be mentioned intense headache, neuritis, neuralgia, sleeplessness, misery, complete mental and

physical prostration, melancholia, epilepsy, disseminated sclerosis, delusions, dementia precox, etc.

Besides these changes which are the direct result of the supply of toxic blood to the tissues, we have a number of infections which occur because of the inability of the degenerated tissue to withstand their inroad. These infections are all of such a nature as not to be able to obtain a foothold in a normal healthy subject.

CANCER NEVER AFFECTS A HEALTHY ORGAN.

Perhaps the most conspicuous at the present moment is cancer. CANCER NEVER AFFECTS A HEALTHY ORGAN. In every case in which I have had an opportunity of verifying it, I have found that the cancer patient was suffering from chronic intestinal stasis, and that the infection by cancer was an indirect consequence of this condition. Cancers of the skin and tongue which are produced by chronic traumatism alone are not included in this category.

If this assumption is correct, it is obvious that to prevent the development of cancer it is necessary to obviate these changes which result in the gastro-intestinal tract from the diet and habits of civilisation. That an enormous amount of benefit and a corresponding freedom from cancer has been obtained by the use of paraffin is in my opinion undoubted. I started to employ paraffin when I recognised the mechanics of chronic intestinal stasis, and have used it in every case since, as it would have been impossible and unnecessary to operate on all patients suffering from this disability. Its usefulness is also confirmed by the extraordinary manner in which it has spread over the whole world. I doubt whether any other material or drug has ever given anything like the same comfort and security from disease that it has. By its use the irritation and harm which result from the action of a purgative are avoided, while it acts on the principle of the flushing tank, rendering the motion soft and ensuring two or three free actions a day.

The other diseases that affect the subjects of chronic intestinal stasis are rheumatoid arthritis, Still's disease, tubercle, Raynaud's disease, many splenic affections, ulcerative colitis, many skin diseases, diabetes, ulcerative endocarditis, gout, etc.

Our chief interest at the present time, therefore, should be to prevent the development of chronic intestinal stasis, and so to obviate the incidence of the several conditions which are due directly or indirectly to its presence, of which latter group cancer interests the public particularly because of its frightful mortality and the physical and mental anguish so frequently associated with it.

How is this to be done? *It can only be effected by a complete revolution in our diet and in our habits of life.* We must assimilate them to those of the natives among whom the entire stasis sequence is unknown. How this can be done with as little sacrifice to the pleasures of the table must be investigated by dietetic experts, to whom the problem should not present insuperable difficulties. It must necessarily be a compromise, but the more thoroughly we approach the conditions of primitive life the more successful shall we be in avoiding the occurrence of a very great number of diseases.

Roughly it would seem that the diet should consist as much as possible of vegetable matter, that it should be consumed largely in a raw state to avoid damage to vitamines, that coarse indigestible material be retained in order to increase the bulk of the intestinal contents, and their stimulating action on the reflexes, that food which if kept becomes offensive and poisonous should be eliminated as much as possible, and that the consistence of the fæces be diminished, and the frequency of their evacuation be increased.

So much for the prevention of stasis. As to the treatment of the existing condition apart from medical measures such as a Curtis belt, paraffin of high viscosity, Kaolin and abdominal exercises. All operative measures on any portion of the gastro-intestinal tract should be started by an examination of the last kink, and by the careful freeing of this bowel from its acquired attachment to the iliac fossa. This requires to be done thoroughly and with the greatest care, and when the mesentery has been restored to its normal length and the bowel to its normal freedom, *any raw surfaces of mesentery must be accurately covered by peritoneum* to obviate any recurrence.

Perhaps of all operations in surgery this procedure alone is followed by the most wonderful effect. The whole condition of the patient is transformed and he is rapidly re-

stored to vigorous health. After all this is not surprising since it is because of this obstruction that all the other changes in the gastro-intestinal tract, whether mechanical or toxic, ensue.

To my surprise I have on very many occasions derived the same advantage by this simple operation that I have previously done by colectomy at a considerably greater risk. Because of the remarkable results which can be obtained by this procedure I am anxious that its value should be recognised.

Having dealt with the last kink the colon should be examined in its length to make sure that no secondary constriction has developed, and particularly in the region of the splenic flexure. Any acquired band found controlling the lumen of the bowel should be carefully divided and any raw surfaces deprived of peritoneum must be covered in accurately.

An inflamed or controlling appendix or an ileal kink should be looked for and dealt with if present.

I do not propose to discuss the surgery of ulcer of the duodenum and stomach, but I would like to state that the duodenal distension, pyloric spasm and gastric dilatation disappear very rapidly after this simple procedure. I hesitate to say what I believe to be the case of its effect upon duodenal and gastric ulcers till I have been able to confirm my views on the subject by a much larger experience, but I am convinced that the employment of the common-sense measures I adopt will reduce very materially the frequency and severity of operations on the upper portion of the gastro-intestinal tract, and will free the sufferer from a large number of the consequences which ensue dircetly and indirectly from chronic intestinal stasis and from the auto-intoxication which results from it.

Change of Address.

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A Case of Coma due to Uræmia and Cerebral Hæmorrhage with Investigation of Plasma Phosphates and Blood Urea.

W. K., æt. 31, a Pole emigrating to New York, suddenly collapsed on board ship and was found a few minutes later lying on the floor unable to move his right arm and leg and unable to speak.

Three days before, his wife noticed he had swollen feet and ankles. He had vomited two hours previously, and he used to suffer from occasional headaches, which became more severe and more frequent three weeks before his attack This was the only history that could be elicited from his wife, who said he had otherwise been in very good health.

He was admitted late at night into Clinical Ward under Dr. French.

The patient was semi-comatose, very restless and unable to speak, but he was partially conscious of his surroundings. His right arm and leg were very spastic. He had a rotatory nystagmus.

Examined a few hours later he was found to have a flaccid paralysis of both right arm and leg with increased knee and arm reflexes and right ankle clonus.

The right plantar reflex was extensor.

Cranial Nerves.—Paralysis of right side of face. Some nystagmus on looking towards the left.

Pupils were equal and both reacted to light.

Discs were pale and indistinct in outline.

Retina showed evidence of old and recent hæmorrhage.

The heart was slightly enlarged towards the left, and first sound was rather indistinct and booming in character.

Pulse, very strong tension; systolic, 210; diastolic, 125—130.

Respiration was normal and not laboured.

Urine, strongly alkaline; sp. gr. 1010; albumen, $2\frac{1}{2}$ per 1,000 ; heavy deposit of phosphates; a few pus cells. acetone present.

The patient was incontinent.

He remained in the same state for about 24 hours, with no change in symptoms or signs.

Venesection was performed and 450 cc. of blood withdrawn, and one hour later blood pressure fell from 210 to 150, but rose again next day to 215. It seemed to give patient only temporary relief for about one hour or so.

Blood urea was over ·23 per cent. (normal ·03 per cent.). Patient was diagnosed cerebral hæmorrhage at first, and later as cerebral hæmorrhage plus uræmia.

Alkali mixtures were given by mouth as much as patient could take: Pot. Cit; Calc. Lactate; and Sod. Bicarb.

On the third day after admission patient became more comatose; breathing became very deep and harsh. T. 100; P. 80; R. 26. His chest began to get bubbly, but improved with atropine injections, and he was passing very little urine.

The inorganic phosphate concentration of the blood pressure was kindly estimated by Mr. F. Cook, and found to be 10 mgs. per 100 cc., a very high figure, the normal being 3 mgs. per 100 cc. blood. The blood was very hydræmic.

Patient steadily became worse, breathing being more laboured and deeper. R. 35; T. 101·8°; P. 112. His chest became more bubbly, but improved with atropine injections 1/100 gr. four-hourly. His right hemiplegia still persisted, and his right limbs were still more flaccid, and reflexes were obtained with difficulty, especially on the right side.

Venesection was again performed and 600 cc. of blood withdrawn. Blood pressure immediately fell from 215 systolic and 130 distolic to 120 and 90 respectively. One hour later blood pressure was still 120. Patient improved slightly and was again partially conscious of what was going on.

A few hours later breathing became very rapid, deeper, and very laboured; Rate 38 per minute; temperature rose to 102; pulse 128. Patient sank into deep coma, breathing became very irregular, patient became cyanosed and died suddenly—four days after onset of coma.

Post-mortem.—Permission was given for a post-mortem only on the brain. There was a big hæmorrhage into the left ventricle with hæmorrhage starting at the external capsule, ploughing up the whole of the lenticular nucleus and part of the internal capsule posteriorly.

There was also a cerebellar cyst about three-quarters of an inch in diameter on the right side situated on the inferior lobe, medial surface. This was probably of very old standing and having nothing to do with patient's symptoms.

The reason for publishing this case, which is with the kind permission of Dr. French and Dr. Poulton, is—

1. The sudden onset and severity of the illness with a complete right-sided hemiplegia, giving the alternative of two diagnoses—cerebral hæmorrhage or uræmia (or both).

Cerebral hæmorrhage seemed more likely, on account of the very high blood pressure and retinal hæmorrhages. But this may occur apart from cerebral hæmorrhage, in chronic nephritis.

And cases of hemiplegia may occur in uræmia with no gross lesions post-mortem, except localised œdema of the brain, as quoted by Osler.[1]

The high blood urea and the high plasma phosphate concentration which appears to occur in most cases of fatal nephritis aggravated by uræmia, seemed to justify the diagnosing of the case as uræmic. A diagnosis was therefore made of both cerebral hæmorrhage and uræmia.

2. The high concentration of inorganic phosphates in the blood plasma is worthy of comment, in view of the recent work by de Wesselow,[2] as regards the "Immediate prognosis in Nephritis." In brief, he says that a high percentage of blood urea does not necessarily imply a fatal prognosis in both acute or chronic forms of nephritis.

He lays stress on the value of the increase of inorganic phosphates in the blood plasma, as more certain and definite in estimating the probable prognosis. It is found that the rise of phosphate closely corresponds to the degree of urea retention, and with this increase of phosphates there is a marked reduction of the bicarbonate in the plasma and a reduction of the serum calcium, proportionate to the increase of phosphate.

His final point is that every case in which the phosphate content has been 10 mgs. per 100 c.c. or over has been speedily fatal. This case agrees in this respect, but no doubt the large hæmorrhage would be sufficient to cause speedy death by itself. We were about to

treat the uræmia by giving intravenous injection of sodium bicarbonate, but unfortunately the patient died before an estimation of the plasma bicarbonate was done, the amount of alkali necessary to reduce the acidosis being calculated out by a special formula.

This particular treatment, however, is largely open to question by some authorities.[3] An interesting article on the treatment of alkali deficit in the blood plasma, by sodium bicarbonate, appears in the *Lancet*, September 22nd, 1923, by J. R. Marrak, "Alkali deficit in Nephritis," and is well worth reading. He says that alkali by *mouth* is quite sufficient for the purpose of reducing the acidosis, as the production of acid is not rapid; and warns one of the danger of giving too much bicarbonate, as a condition of alkali excess is easily brought about in nephritis, resulting in increase of œdema and in œdema of the lungs.

Furthermore, excess of bicarbonate tends to upset the balance between sodium, potassium, and calcium of the body fluids. Hence the latter two should be given at the same time as the bicarbonate, the calcium being all the more necessary, because, as pointed out above, the calcium decreases proportionately to the increase of the alkali deficit.

A complete and more comprehensive account on the subject of uræmia, its prognosis and treatment will be found in the references given.

S. S. SUZMAN.

1. Osler, Principles and Practice of Medicine.
2. *Lancet*, July 28th, 1923.
3. *Quarterly Journal of Medicine*, July, 1923.

Publications Received.

St. Bartholomew's Hospital Journal, St. Mary's Hospital Gazette, The Isis, The New Cambridge, University of Durham College of Medicine Gazette, King's College Review, Sydney University Medical Journal, Queen's Medical Magazine, Abstracts of Bacteriology, The Cambridge Gownsman.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Medical Unit, University of London O.T.C.*

Programme of Training for Session 1923—24.

OCTOBER.

1st Parade.—Aims and organisation of Army Medical Services.
2nd Parade.—Army Medical Service Establishments of a Division, including a Field Ambulance.
3rd Parade.—Causes of disease.
4th Parade.—Wounds and their treatment.

NOVEMBER.

1st Parade.—Preparation and despatch of orders, etc.
2nd Parade.—Hæmorrhage; methods of arresting.
3rd Parade.—Use of triangular bandage.
4th Parade.—Evacuation of wounded.
5th Parade.—Application of splints.

DECEMBER.

1st Parade.—Diseases commonly affecting soldiers.
2nd Parade.—Methods of Disinfection.

JANUARY.

1st Parade.—Map reading.
2nd Parade.—Fractures; treatment.
3rd Parade.—Duties and equipment of R.M.O.

FEBRUARY.

1st Parade.—Anti-gas appliances.
2nd Parade.—Bandaging.
3rd Parade.—Water supply.
4th Parade.—Hygiene on the march.

MARCH.

1st Parade.—Purification of water (demonstration).
2nd Parade.—Sanitation of camps.
3rd Parade.—Assembling web equipment.

MAY.

1st Parade.—Stretcher drill.
2nd Parade.—Squad drill.
3rd Parade.—Stretcher drill.
4th Parade.—Squad drill.
5th Parade.—Stretcher drill.

JUNE.

1st Parade.—Collecting wounded.
2nd Parade.—Loading wagons.
3rd Parade.—Collecting wounded.

Lectures for Certificate "A" Candidates.
Tuesdays, 5.0 p.m. at St. Thomas's Hospital.

*Guy's section parades will be held in the Physiological Theatre on Thursdays at 5.0 p.m. unless otherwise stated on the O.T.C. Notice Board.

Pain.

Paper read before the Physical Society by Mr. J. A. Currie.

(*Continued*).

Turning to the question of visceral and referred pain, we find that the investigations of Head and MacKenzie, who developed the views of earlier workers, formed the basis of a remarkable and protracted controversy, Head maintaining that the viscera were capable of sensation, MacKenzie that they were not. Ross, in 1888,[7] came to the conclusion that two forms of pain, splanchnic and somatic, occurred in visceral disease, and attributed their presence to the diffusion of impulses from the terminations in the cord of splanchnic nerves to those of the somatic sensory nerves. In 1891, MacKenzie demonstrated that in certain diseases, notably angina pectoris, there was marked cutaneous hyperæsthesia situated at some distance from the lesion itself. In angina pectoris the pain is often referred to the distribution of the first, second and third dorsal nerves, that is, to the internal border of the forearm, to the inner surface of the arm, and also to the skin over the front of the upper intercostal spaces. Now MacKenzie[8] has shown that this same area may be affected by a pilo-motor reflex, a condition of "goose-skin" which occurs in some people when parts within the area are stimulated. In the case of this particular area, rubbing the skin with flannel, just below the nipple, produced a goose-skin eruption up the chest as high as the second rib and down the ulnar border of the arm.

Similarly an area where this reflex is observed in connection with the stomach, becomes affected in certain patients after swallowing a glass of cold water. This feeling of cold in the same area as that subject to a pilo-motor reflex was attributed by MacKenzie to the reflex constriction, by sympathetic impulses, of the skin vessels, but it has been proved[9] that it is really due to true thermal sensibility in the œsophagus.

The goose-skin eruption sometimes corresponds with a peculiar "creeping" sensation of the skin, to which MacKenzie applies the term "autonomic sensation," and other sympathetic phenomena, such as dilatation of the pupil, are simultaneously observable. MacKenzie states that he is able to tell, from the presence or absence of this sensation, whether his pupil is dilated or not when the skin is stimulated. The correspondence of pilo-motor areas, and areas affected by cutaneous hyperalgesia in disease, led MacKenzie to the conclusion that referred visceral pains could be attributed to the sympathetic (autonomic) system, and it is to him that we owe the terms "viscero-motor" and "viscero-sensory" reflexes. He considers that the cutaneous symptoms in visceral disease resemble those due to focal irritation of the cord, and are due to an increased sensibility of those areas of the cord which receive autonomic fibres.

The viscera, according to MacKenzie, are insensitive to ordinary stimuli, while the three great layers of the abdominal wall, the skin the muscles, and the loose connective tissue outside the peritoneum, are exquisitely sensitive to pain. He vigorously denies the existence of pain in the viscera. His view is that they are constantly sending afferent impressions, unperceived by consciousness, to the spinal centres, and that in diseased conditions these impulses are so numerous that irritation of spinal foci results. Radiation of the impulse causes extension of the spinal area affected, and the disease becomes associated with cutaneous hyperalgesia.

Head, on the other hand, has definitely avowed his belief in true visceral pain, which may, or may not be associated with cutaneous tenderness. He meets the criticisms of his opponents with the easily verifiable statement that deep pain over a lesion may co-exist with cutaneous hyperalgesia in another area, presumably due to the same lesion. MacKenzie,[8] however, has advanced a very good point in support of his view. While resecting a portion of the bowel from a conscious patient he had occasion to lay the prepared, upper end upon a sterile cloth, while occupying himself with the lower end. He noticed that the patient complained of pain every time a peristaltic wave passed over the upper end, and that this pain was referred to a skin area several inches away from the bowel, which was lying on a sterile towel at the patient's side.

This evidence seems conclusive, yet the work of Guy's researchers has shown that

MacKenzie's opinion is not really supported by the facts. Dr. Hurst[9] and his co-workers have demonstrated that the only immediate cause of visceral pain is tension. The force of MacKenzie's original observations upon the viscera of conscious subjects is nullified by the fact that the stimuli employed were not this "adequate" stimulus of tension. The facts observed at the operation quoted above are not to be regarded as disproving the existence of visceral pain, although here tension was apparently the stimulus. The bowel had been moved from its position within the abdomen, and the cerebral centres had probably interpreted the pain as arising in the normal situation of the viscus. This "average localisation" is also seen in the skin, if a painful stimulus be applied to an area in a subject whose skin is loose enough to be moved freely over the deeper structures, and no one would deny the existence of pain in the skin. The view now generally accepted is that the balance of evidence favours the existence of visceral pain. Head's final retort certainly does not lack force: "Some have tried to maintain that the viscera are insensitive . . . but no one who has suffered from the passage of a renal calculus, or a true referred pain from inflammation of the pulp of a tooth, will look upon such statements as anything but hair-splitting dialectic."[3]

Besides maintaining his belief in true visceral pain, Head states that the pleura and peritoneum give rise to true pain when inflamed. In pleurisy for instance, percussion over the intercostal spaces gives pain. Auscultation is not painful (as it would be if cutaneous hyperæsthesia were present), unless the stethoscope is pressed down fairly deeply.

We are to conclude that pain may be localised in the viscera, but as a rule this does not happen. Internal surfaces are usually unable to respond to stimuli to which they have never, in the racial or individual history, been subjected. Head believes that even tension does not always produce pain, owing to the resistance of the central nervous system. His conclusion is that the viscera have a double nerve supply; one, a deep system of nerves which remains intact after all the cutaneous nerves have been severed, the other a nerve supply which arises from the centres which also supply the skin. The former are analagous to the deep proprioceptive set of nerves which Sherrington has shown to be distributed to the skeletal muscles.

Head has given us, in a paper in "Brain," in 1893,[10] the results of some remarkable investigations of referred visceral pain, the laboriousness of which it is impossible to exaggerate.

He investigated herpes zoster in the hope that he might throw some light on the causation of referred pain. Herpes zoster is, as we know, due to inflammation of the posterior root ganglia of spinal nerves, and when these are inflamed, Bayliss' "antidromal" fibres undergo necrosis. Now these fibres conduct in either direction, according to the nature of the specific end-organ of each. Thus it is that fibres conducting pain impulses, as well as those possessing a trophic function, are affected in herpes, and it is possible to map out, by a study of herpes, the distribution of cutaneous areas to which pain is referred from the viscera.

Head worked out the distribution of the sensory visceral nerves on much the same lines as those adopted by Gaskell in the study of motor inhibitory and autonomic nerves.

The herpetic eruptions correspond with pain areas in that:—(1) they have the same distribution; (2) they do not overlap; and (3) then have the same points of maximal intensity. Now Sherrington has shown that areas of common sensation do overlap considerably, and Head deduces from this that the pain sense has a distribution which can be correlated, not with that of the spinal nerves, but with the action of centres in the spinal cord itself.

In this distribution of the areas subject to herpetic eruption there are two gaps, due to the disturbing influence of the limbs, that in the arm representing the distribution of the fifth, sixth, seventh, and eighth cervical nerves; that in the leg the distribution of the lumbar nerves from the first to the fifth.

The importance even of these remoter areas will be appreciated when the relation of ulnar pain to heart conditions, or of perineal, ischial, or even calf and foot pains to prostatitis is considered.

Why is pain referred? Head explains the phenomenon in the following way:—

It is well known that when the sensation in any particular area is diminished, as, for

instance, in tabes, a painful impulse in that area will be referred to the area of skin above, or below it, or even to the opposite side. This phenomenon is known as allocheiria, and is due to the fact that the areas to which pain is referred, not being anæsthetic, possess a relatively great sensibility. Normally the visceral afferent impulses are not consciously perceived. Any increase above the normal intensity of the stream of afferent impressions from the viscera results in their reference to the area of skin supplied by the same segment of the cord as the viscus in question, the skin being much more sensitive than the viscera.

At times the phenomena of referred pain are rendered more striking by the presence of generalisation. In certain conditions of ill-health, such as anæmia, or, in women, dysmenorrhœa, pains are felt all over the body, or a pain usually felt in one area is referred to a much larger area. Any general infection may cause generalisation. Head quotes the case of his brother who suffered from generalised pains during an attack of typhoid fever. Anyone who has had a bad tonsillitis, with fever, knows, to some extent, the pain of dysmenorrhœa, with pains, aching, and tenderness in the loins and back.

This generalisation is due to lowered resistance of the spinal centres, with consequent irradiation of impulses from one centre to its neighbour.

It will be interesting for a moment to consider the question of viscera which have a double nerve supply (a supply from two different segments, not merely the "double" supply to which we have referred before), and to see how a consideration of anatomy and of embryology may aid in the interpretation of pain associated with such viscera.

"Certain abnormal conditions of tension within the auricle can produce pain and tenderness, referred to the sixth and seventh thoracic and adjacent segmental areas. On the other hand, diseased conditions of the aorta and ventricle may be associated with similar areas higher up on the chest, or in the region of the third and fourth cervical."[3]

This may be explained if the development of the heart is considered. Originally it was a simple tubular structure. As it developed it became folded upon itself and septa grew between the auricles of the two sides, and between the ventricles, producing the four-chambered structure with which we are familiar.

Originally the auricles were formed from the distal, while the ventricles arose from the cephalic portion of the tube. As a result of the changes just described the auricles came to lie above and behind the ventricles, so that now the nervous supply is upside down in relation to the topography, though not to the development of the heart. It would seem that the autonomic sensory supply to the heart is an ancient mechanism, evolved at an early stage in vertebrate development.

The uterus, again, receives its nerve supply from two sources, the cervix receiving fibres from the third and fourth sacral nerves, while the body is supplied by the eleventh and twelfth dorsal, and sometimes the first lumbar. Pains due to uterine contractions are referred to the dorsal region, those following stretching of the lower segment and cervix—the true labour pains—to the sacral region.

It is unnecessary to multiply these instances.

* * * *

One aspect of pain is now, happily, a question which may be viewed through a new pair of spectacles in these days of anæsthetics. In the old pre-anæsthetic days, a surgeon was obliged so to plan his operations that they could be performed in the minimum number of steps. This is still one of the operator's prime duties, but he is not obliged to hurry as of old. Perhaps the patient's gain is, in some respects, a loss to the admirer of technique.

In these days it seems hardly credible that there should have been so much opposition to the general adoption of anæsthesia in surgery. In Simpson's time, it was only after a strenuous fight that reason finally vanquished prejudice. Surgeons confessed their faith in the beneficial effects of the pain and agony caused by the dreaded knife; obstetricians pointed out Nature's superiority over man and all his methods; and theologians opposed the new discovery as subversive of the established order of things—established, presumably, by Divine Ordinance. To those moralists who said, "How unnatural for you doctors in Edinburgh to take away the pains of your patients," Simpson retorted "And how unnatural for you to cross over from Ireland to Scotland against tide and wind in a steamboat."

Eventually, after a keen struggle, Simpson was able to say, with the poet Middleton,

"I'll imitate the pities of old surgeons
To this lost limb—who, ere they show their art,
Cast me asleep, then cut the diseased part."

It would be impossible to conclude a paper on pain without reference to a normal occurence regarded by half the human race as their most intensely painful experience. If you speak of pain to the average parous woman, she will probably, in her own mind, refer every consideration of pain to this criterion.

It is generally accepted that pain is the inevitable lot of every woman who has a child, and that all animals suffer pain during labour. Pain in labour is regarded by many authorities as beneficial, as, during the expulsion of the head, the pain caused by stretching of the vulva will cause a protective reflex inhibiting the woman's voluntary expulsive efforts, and so preventing laceration.

The late Dr. Horrocks, in a paper to the *B.M.J.*, in 1906, expounded in an unequivocal fashion his policy of non-interference in normal labour, condemning not only the practice of performing too frequent vaginal examinations, a fruitful source of sepsis, but also that of attempting to prevent laceration by controlling the expulsion of the head. The practice of giving a "whiff" of chloroform at the height of each pain met with equally merciless treatment at his hands. Nature, he contended, knew her job, and did not need man's aid in its normal performance. The whole motive of an admirable paper was to express the warning "Hands off!" to the too assiduous accoucheur.

The paper was greeted by a deluge of letters to the *B.M.J.*, some supporting, but more condemning the opinions of the Guy's obstetrician. To his statement that labour was normally and necessarily painful the critics responded by pointing out instances of painless labour in animals and even in women. A further weapon in their hands was the argument that the pelvic changes in women consequent upon the erect posture made human and animal labour vastly different.

Moreover, the more educated and highly specialised the individual, the more sensitive is she as a rule. Native women, those of a low grade of mental development, and those accustomed only to the rude amenities of rural existence will stand a degree of pain that a modern civilised woman would find intolerable. So spoke the critics.

One extremist, who went much farther than Dr. Horrocks, stated that the activities of the accoucheur should be confined to the use of the scissors. The critics responded with the retort that that accoucheur ought to be confined himself!

On the whole, one is inclined to agree with Dr. Horrocks that unnecessary interference is followed only too often by lamentable results. Most practitioners, nowadays, I believe, adopt a *via media* between the extreme policy of absolute inactivity and that of clapping on forceps upon every occasion in order to save the accoucheur's time and his patient's nervous system.

* * * *

I have attempted to deal in this paper, firstly with the influence of pain on man's evolution, both racial and individual, and secondly with pain in disease. We have seen that pain may be a sign of disease at some remotely situated part. With regard to the viscera we are, I think, to conclude that the pain due to disease in them may be a true visceral pain, or one referred to a corresponding skin area, and that both may co-exist.

Diagnosis of the cause of pain is rendered more difficult by the existence of "functional" pains, a term which, though sometimes a cloak for ignorance, may be justifiably applied to certain cases which seem, nowadays, to be becoming more numerous. It is certain that civilised beings are more sensitive to pain than their ancestors were. Apart from the question of persistence of pain, long after the organic cause has been remedied, owing to the establishment of new associations and nervous connections, the resistance of mankind to pain does not seem to be as great as it was in days gone by. Pains with an entirely cerebral basis, neuroses, and hysteriæ abound. It is these pains, to which I have hardly referred, that I ask you to discuss, in addition to the papers which have been read.

Gentlemen, I fear that I have not altogether avoided the pitfall of making this

paper a mere prosy recapitulation of other people's views. My only apology is the great interest of the subject itself and its importance not only to the medical man, but to the whole of the animal kingdom.

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The Diagnosis of Diphtheria,

By A. J. EAGLETON, M.D. (Lond.), M.R.C.P. (Lond.)

Introductory.

In a previous paper which appeared in this journal of February 18th, 1922, it was pointed out that, amongst the specific fevers commonly met with in this country, Diphtheria occupies a unique position. We know the cause of the disease; we can prevent its occurrence; we can detect its presence, and can cure it with certainty. And yet for twenty years there has been no decline in the annual mortality from this disease, and each year diphtheria levies its toll of infant suffering and death.

No treatment can be efficacious until a diagnosis has been made. For this the doctor in charge of the case is responsible.

In diphtheria the diagnosis is derived from two sources of knowledge, the bedside and the laboratory, but whether in any specific instance the determining evidence be derived from one or other, it is the clinician who is personally responsible. There is an old saying that fire is a good servant and a bad master; the same is true of the laboratory diagnosis of diphtheria.

It has become the fashion for the clinician to rely on the laboratory, and neglect the evidence of his own senses; to wait for the "result of the swab." In some cases where, were he independent of the laboratory, he would not hesitate to give antitoxin, he will, I regret to say "await the bacteriological diagnosis" and meanwhile withhold antitoxin and risk his patient's life. There is one golden rule which, if followed without exception, would do much to lessen the infant mortality from diphtheria. It is so simple that I am almost ashamed to mention it, and yet it is neglected every day.

If, in a case of possible diphtheria you are suspicious enough to take a swab, administer antitoxin at once.

You will err in many cases, but you will save many lives.

With this brief introduction I should like to consider the different ways in which the Bacteriologist can help the Physician to make an exact diagnosis in doubtful cases, and the value to be attached to each piece of laboratory evidence.

1. *Result of Throat Swab.*—The laboratory generally returns a result of "Positive" or "Negative." This means the bacteriologist has examined a growth obtained from the swab, and has, or has not found in it, organisms resembling B. Diphtheriæ. That is all. The correctness of the report depends on his knowledge of the morphology of B. Diphtheriæ. Assuming that the positive finding is made by a reliable authority, it only tells us that, possibly, diphtheria organisms are present. Whether the organisms found are true virulent B. Diphtheriæ, or not, can only be determined by further research including animal test.

The physician has, however, the result of accumulated bacteriological evidence to guide him. Thus we know that from cases of clinical diphtheria practically 100 per cent. of the diphtheria-like organisms seen in culture prove to be virulent B. Diphtheriæ, whereas similar organisms from carriers are often avirulent, e.g., in a recent series of mine 33 virulent cultures were found and 52 avirulent.

The physician has in fact to interpret the laboratory finding in the light of the clinical condition. If the case is probably diphtheria and organisms resembling B. Diphtheriæ are

found ("positive") then the latter are almost certainly virulent. Whereas if the case is doubtful the bacteriological finding is doubtful also. This being so what is the good of the bacteriological evidence?

The answer to this is that in the case of a "positive" report it confirms the clinical diagnosis of diphtheria, but does not help in a doubtful case. On the other hand, if the swab is properly taken, a negative report is very strong evidence against diphtheria. In a recent series of undoubted cases of diphtheria a "positive" result was obtained by my colleagues and myself from 95 per cent. of the swabs and virulent B. Diphtheriæ isolated.

Bacteriological reports on swabs would be greatly enhanced in value if they were more detailed; thus the number of diphtheria-like organisms found could be easily expressed as "a few," "+," "++," "almost pure culture," etc. This would be a distinct advantage as in most cases of frank clinical diphtheria the organisms are present in abundance.

Another procedure that should never be omitted is the examination of a direct smear from the swab. The smear is best made at the bedside. As much material as is possible should be put on the slide and thoroughly rubbed in; the slide is then fixed in a flame and sent with the other material to the laboratory. In the series above alluded to diphtheria-like organisms were seen on direct smear in 85 per cent. Moreover, the organisms of Vincent's Angina can be readily detected when present, and this infection of the throat is much more common than is generally realised. It cannot be diagnosed by the usual procedure as the organisms do not grow on the ordinary media.

We see then that in a doubtful case a "positive" result is of little value, because there is no proof that the organisms seen are virulent. With the most rapid methods at our disposal the virulence can in some cases be established in 48 hours from the time the swab is taken. But even if in a doubtful case the laboratory could report "virulent B. Diphtheriæ present," would the physician gain anything from this knowledge? No. He might still be dealing not with a case of diphtheria, but with a carrier.

2. *Laboratory Test of Patient's Immunity.*—If by any means the physician could tell whether or no a patient in whose throat diphtheria-like organisms were found was liable to contract diphtheria, he would be a long way towards establishing a correct diagnosis.

The following diagram will make this clear:—

	Virulent Diphtheria Bacilli present.	Avirulent Bacilli present.
Patient Immune.	Carrier of Virulent B. Diphtheriæ.	Carrier of Avirulent Bacilli.
Patient not Immune.	Case of Diphtheria.	" "

That is to say that in an immune patient a "positive" report means a carrier of virulent or avirulent bacilli. In the non-immune patient it means a case of diphtheria or a carrier according to whether the bacilli are virulent or not.

Again, if we do not know whether the organisms are virulent or not the non-immune patient may be a case of diphtheria; the immune cannot be. Now by means of the Schick test the laboratory can tell whether the patient is immune or non-immune. If this test be carried out at the time the swab is taken the result can be read (in 90 per cent. of cases) by the time the bacteriological report is forthcoming and the two findings, bacteriological and immunological can be correlated.

The diagram given above can be altered as follows:—

	Organisms:	
	Virulent.	*Avirulent.*
Schick −	Carrier.	Carrier.
Schick +	Case.	Carrier.

If then the laboratory returns "positive" and the patient gives a Schick negative reaction, we are dealing with a carrier. If the laboratory returns a positive and the patient gives a Schick positive reaction we are dealing with a carrier or a case, and cannot be certain until we know whether the organisms are virulent; we should be wise, however, to treat it as a case. There is one detail that is of importance; if antitoxin is given at the time when the Schick test is performed, the latter is of no value, the toxin which causes the reaction being neutralised by the antitoxin given. It is possible, however, to do the Schick test and after an interval of six hours administer antitoxin if it be thought advisable. By this time the toxin will have had sufficient start and the antitoxin will be unable to undo its combination with the tissues.

It is apparent that this combination of bacteriological and immunological evidence represents the greatest help that the laboratory can give the clinician. Unfortunately it is but rarely that the doctor in charge of a case can wait for such help. In an undoubted case of clinical diphtheria antitoxin must be given at once; laboratory procedures are of secondary importance. Again, "If in a case of possible diphtheria you are suspicious enough to take a swab, administer antitoxin at once." There are, however, occasions when full use can be made of this valuable evidence. Take for instance the following, which is constantly occurring in schools, hospitals, etc. One or two cases of diphtheria occur in a ward or dormitory. The contacts are none of them ill, but may perhaps have a nasal discharge or slight sore throat. Swabs are taken, the Schick test is performed, and within 24 hours the physician is in complete command of the epidemic. Quite recently my colleagues and I have been enabled by these measures to check an unpleasant outbreak in a childrens' hospital.

Summary.

The diagnosis of diphtheria must be made by the physician, and any laboratory procedures of which he makes use must be interpreted by him.

In every "Suspicious" case antitoxin must be given at once; there must be no waiting for the bacteriological diagnosis.

A "positive" bacteriological report is of less value than a negative, providing that the swab has been properly taken. An absolute diagnosis is only given by the laboratory when in a Schick positive patient virulent B. Diphtheriæ are found.

The combination of bacteriological investigation and the Schick test is invaluable in dealing with epidemics.

Conclusion.

The present fashion of regarding a positive bacteriological finding as the equivalent of a diagnosis of diphtheria is not only unsound but dangerous, in that it tends to remove the sense of responsibility from the clinician.

He alone can make the diagnosis, though he may make use of the laboratory for this purpose as shown above, and may derive most of his evidence therefrom.

Correspondence.

To the Editor of Guy's Hospital Gazette.

A Nurse's Training.

Dear Sir,—Filled as I am with devotion to my Hospital, I was deeply chagrined to read a statement by a hospital secretary that there were only three mediaeval hospitals in London, and that all the rest were mere mushrooms of the 18th Century. The fact that the Secretary was appealing for funds and that he appeared, for some occult reason, to expect especial support in virtue of the great antiquity of his hospital, does not detract from the truth of his statement. I am not altogether convinced of the advantages of mediaevalism in modern hospitals, but not to be outdone I can at least point, with pride, to our nursing system as a real mediaeval survival; I say mediaeval because the Middle Ages and darkness seem to be inseparable journalistic companions, but if I say Mid-Victorian it will give a better idea of the effeteness of the system and will at the same time not be another assault on the poor tattered reputation of the Middle Ages.

All this is a somewhat pompous preamble to an abrupt question. Why is the Guy's nurse cast out on to a cold and unfeeling world half trained? My ears are deafened by the stentorian brassy cry of negation from all sides. But vociferation is not argument, and while I value my peace of mind and my life too dearly to criticise publicly, at least, the actual results, it must be reiterated that by a system of training which is partial, no one can, save by accident, be more than partially trained.

The training of a medical student, with all its faults, is devised and balanced, and his stay in the various departments is so arranged that there is no one who can say, when his final approaches, that he has not had every opportunity of learning all the branches of his profession, even although he may not have fully availed himself of them, but to borrow the turn of speech of your Rugby contributor, far otherwise is it with our nurses.

To one who has noticed the tall, dim, ethereal beings who drift round the hospital, fantastic caps perched on the utmost peaks of monumental "buns," bearing trays, the unsubstantial contents of which are veiled from the public gaze by filmy white gauze, bearing them reverently, solemnly, mystically, as in a Sacred Rite, and starting like frightened fauns when spoken to even by new ward clerks, as affrighted as themselves; to anyone who has watched the miraculous transmutation of these unreal, these incredible shadows, into those competent, very material and entirely imperturbable persons who are labelled Strings, it must be at once obvious that their training has developed and expanded their characters in an extraordinary way.

It is not of the development of character that I am writing, but of the scientific equipment which has been given them for the exercise of their profession. One object of training is achieved; what of the other?

I am not aware of the intellectual value of sweeping floors; I have swept many and although it may have been good for my soul, I believe I learnt nothing from it save the truism that there is always more dust left in the floor than was ever swept out of it. Perhaps there is some higher intellectual plane whose dizzy levels can only be reached by assiduous sweeping of floors, although charwoman, to be sure, are not always intellectual, sometimes even stupid, but perhaps that is the Higher Intellect: Anyhow, whatever its potentiality as a cogent moral force, I do not think that anyone will seriously affirm that sweeping the floor of a Surgical Ward is an entirely adequate qualification for receiving a certificate as a fully trained nurse, yet that in effect is the Gilbertian qualification which is all that many Guy's trained nurses have as far as their Surgical work is concerned! I am dealing at some length with the lack of Surgical training which some nurses suffer from, but of course there are an equal number whose training is as nearly all surgical as the other is nearly all medical.

The terrified lamb is thrust into a Surgical Ward, a little book is thrust into her hand together with a broom, and behold the young hopeful is launched on her glorious career as a Ministering Angel (Certificated). With what reverence and breathless awe she opens the Sacred Book containing the Rota of her daily ministrations!! 8 a.m. polish brights, 9 sweep wards, 10 wash lockers, clean, sluice lavatory and bathroom, etc., etc., together with many duties much less romantic than these. Not much work for a ministering angel here! However, hiding her disappointment and disillusionment with a resolution that sometimes breaks down into lonely nocturnal tears, she struggles on, receiving more metaphorical kicks than ha'pence, metaphorical or otherwise, consoling herself for her present drudgery in the thought that all this is the necessary prelude to real nursing in a surgical ward. Where the tragedy or comedy comes in is that, from the day when she sweeps the last weary dust-sweating inch of her surgical ward to the day when an exacting outside world expects her to dress at operations and to dress and nurse patients with drainage tubes, splints, colostomies, gastrostomies, cystostomies and other impedimenta, she may never so much as set foot in a surgical ward again!

She may indeed do a further three months as a junior on night duty in a surgical ward. Here indeed she will only sweep the ward once instead of three times, but instead, she will make toast most of the night, make that happy carefree noise, with the range and with cups in the kitchen which keeps the head nurse, and incidentally some of the patients, awake, and spend her spare time "doing" the breakfast and other jobs as useful, but less picturesque. All this may bring her a little nearer to her heart's desire, but not appreciably so, and the next change may see her transported to the Medical Block where the rest of her training may be accomplished. I have no doubt, in practice and certainly in theory, that most nurses get more surgical training than that but I have known of several nurses who have had no more chance of acquiring a good knowledge of surgical nursing before they received "Strings" for Out-Patients', Babies', or the Medical Wards, than our Heroine. Worse still! It is possible to spend all one's "stringed" existence in Out-Patients' doing the work of a porter or policeman! Twelve whole months or more of it. It is possible to spend it in the Baby Ward, in the Gynæcological Wards, or in the Oto-rhino-laryngological Wards, and while some are spending surfeited unwilling months in special departments others never get the choice of doing even three months in them, perhaps never even get the chance of sweeping their special departmental floors. It is as if the Medical School were to decree that a medical student should be content with doing twelve months in the Back Surgery and eighteen in the Gynæcological Wards, as a preliminary to consultant practice as a Throat Specialist, or as if the Army were to spend two years teaching a man to groom a horse, never teach him to ride it, make him do twelve months as a bayonet fighting instructor and then give him a certificate as a trained airman. Such an illogical haphazard system must be a barbarous survival of the days when a nurse was no better than a charwoman, and if the system is to persist it is only fair that other appanages of these less formal days should be restored and nurses should once more be entitled to repair to the "Ship and Shovel" for their daily quart or gallon, or whatever was their statutory ration.

I have no reason to doubt that the powers that be do their best to arrange matters so that a nurse gets a fair chance of acquiring a general knowledge, but in the first place they do not even attempt to divide their period in a position of authority, between the two main branches of their training, Medicine and Surgery, and in the second place it should not be in their power to arrange or alter matters at will. The nurses' curriculum should be as systematic and unalterable as the compulsory schedule of the Medical student, and her certificate should be dependent on its having been carried out in every particular. The nurse has hitherto had no rights, no security of tenure, so to speak; her particular work is just as likely to be arbitrarily and abruptly changed as is her yearly holiday or her half day. Exigency of hospital service is pleaded as a justification for both

kinds of change, but it is more than doubtful if it is really a valid one. In the education of the medical student, the curriculum is proof against hospital exigency; there may be, and is naturally, compromise at times, but not such as to alter radically the even tenour of the student's progress. The nurse's training has never been looked at from such a fixed angle. The work of the hospital is paramount, the training only an incident, and when the time comes when the hospital service seems to demand sacrifice on the part of either the hospital or the nurse's training, the line of least resistence is taken, and the training goes overboard without any serious endeavour to find out if a compromise or a readjustment could be effected which might remove the circumstances which led to the crisis or at least obviate or moderate the scope of the concessions to be made. If the nurse is given a curriculum as a charter there will be less tendency to impose upon her loyalty and devotion to duty, and I am convinced that the hospital would not suffer but rather it would derive great benefit in many ways; not least, its reputation as a training school would be enhanced. I do not think that the work of the hospital is in any way injured by the presence of the Dean in the Medical School whose chief function is to see that the student's time is not imposed upon by the Hospital Authorities.

It is not contended that the training of a nurse is strictly analogous with that of a student. It is obvious that the hospital must bulk more largely in the nurses' horizon; that her training must be more elastic in respect to its legitimate claims, but if a schedule were to be drawn up on lines, more or less similar, not much difficulty would be found in reconciling the two claims.

Even if it is difficult to arrange that every nurse shall pass through all the departments of the hospital, it is at least easy to arrange that every nurse should do six months as a head nurse in a medical ward and six months in a surgical ward. It would be the thin end of the wedge at least, and eventually a day will dawn when the Guy's trained nurse will, when she receives her diploma, be fully qualified to act as a nurse or a sister in any capacity whatsoever, because of, rather than in spite of her system of training, quite apart from the question of the re-arrangement of the training, a quite considerable amount of valuable time might be saved by cutting down the manual labour which the unfortunate probationer is expected to perform.

It is a law that all tradition is sacred, even if it is bad tradition, so I will not attack the established position of Brass-polishing in the moulding of character, but if a case can be made out for the retention of unnecessary brass, the same cannot be said for dust. Five solid hours of the day are spent by divers persons in sweeping one of the big medical wards. Four times the dust is swept off the floor, where it is relatively innocuous, and four times it descends again minus the quantity ingested by the patients. Is it too much to suggest (O damnable heresy!) that it would be true economy to do the same work really effectively in a tenth of the time by the aid of electric vacuum cleaners. Surely this is not a revolutionary proposal in this year of grace 1923, even if brooms have been used since the dawn of time.

I have purposely drawn what is perhaps an extreme picture of the onesided and haphazard nature of the training with the intention of emphasising what can happen without suggesting for a moment that it always does happen. The very possibility of its happening is sufficient to damn the whole system and in point of fact, to my own certain knowledge, it has happened, is happening and will continue to happen as long as the present system endures. Nothing I have said implies that the Guy's training is worse than that at other hospitals, and even if it were better, it would be neither material or relevant. Let Guy's set the example and where loyal service is so unswervingly given, let the hospital authorities be generous enough to remember that "Dare quam accipere" has a meaning for themselves as well as for the nurses.

I make no apology for these crude and dithyrambic lines, since while prepared to acknowledge minor inaccuracies of detail, I am assured and certain of the broad accuracy of the whole, and I am content if I succeed in making even one laborious reader consider with fresh awakened conscience this ancient unenlightened system which needs but the hard, white light of day for it to crumble into dust and end an existence whose very inception is difficult to understand.—Yours sincerely, E. R.

P.S.—I am informed that a recent change of policy has led to most of the sweeping being done by the wardmaids. This is a welcome step in the right direction, but "sweeping" is not to be taken strictly, literally; it is symbolical of the whole, and the principle remains unaltered by the change. E. R.

United Hospitals Winter Sports Club.

SIR,—I trust that you will assist me to bring the United Hospitals' Winter Sports Club to the notice of your readers.

The Club was founded to encourage Winter Sports amongst Past and Present Students of all recognised Medical Schools in the United Kingdom.

As the Grand Hotel, Griesalp, Bernese Oberland, was considered a success last season, it has been decided to make this the Club Hotel for 1923—24.

Our President, Lord Dawson, has very kindly consented to give a trophy for a ski-race to be held at Griesalp between January 6th and January 13th.

All particulars can be obtained from the Manager of the above hotel.—Yours sincerely,

J. DUNCAN LYLE,
Hon. Sec.

Oldfield Lodge,
Maidenhead,
October 22nd, 1923.

Bright's Disease.

DEAR MR. EDITOR,—In the GAZETTE of October 13th R.G.W. refers to an article on Bright's disease published in an earlier issue, which he appears to think proves that nephritis and Bright's disease are distinct conditions. But Bright's disease is obviously the disease described by Bright. If R.G.W. will refer to Bright's description of cases "terminating in dropical effusion" in his "Records of Medical Cases" and his papers in the early volumes of the Guy's Reports, or to the admirable summary of his teaching in Sir William Hale-White's paper in the "Reports" of January, 1921, he will find that Bright gave a wonderful description of nephritis. He will then realise that his suggestion that Bright's disease and nephritis are different conditions has not the slightest foundation in fact.—Yours truly,

ARTHUR F. HURST.

New Lodge Clinic,
Windsor Forest, Berks.
16th October, 1923.

The Present Medical Curriculum.

DEAR MR. EDITOR,—I have just had the pleasure of reading the special number of the G.H.G. you issued on September 23rd.

The warmth of the welcome you extend to the Guy's fresher is altogether admirable, but it is quite possible that he will feel a little chilly when he has read the paper through, grasped its contents, and realises the almost impossible standard of industry and intelligence you expect from the ordinary man if he is to be considered a worthy son of his Alma Mater.

You write as you do, sir, I suppose on the principle that if you aim at the moon you may hit the weathercock. Certainly the course you suggest seems to me well-nigh impossible save for a Newton Pitt, a Perry, or other exceptional person endowed with fertile brains and superhuman industry.

Were the platitudes in your paper taken literally you would indeed "frighten the new student by the recital of the preliminary requirements," and I have visions of the Guy's graduate of to-day being transformed from the healthy jolly youth he was when he first entered into a be-spectacled anæmic monstrosity at the end of his hospital career; for to carry out the task sketched out for him would hardly permit of his going to bed, much less allow of leisure for Honor Oak Park and its allurements.

Do you not think, sir, that the curriculum is getting more than the ordinary man can be expected to accomplish in the time at his disposal, and is not a good deal of it more for the edification of theorists and examiners, than to help him to earn his living in a useful honest way?

There is not room on the staff of a hospital for more than a few, indeed a large percentage of men will never have a chance of doing hospital work except as students, and equally few the opportunity of using elaborate methods and apparatus, which they spend so much time in mastering, in their everyday work.

It is obvious that the G.-P. must have a sound knowledge of fundamentals to enable him to recognise and treat satisfactorily the ordinary case, but to insist on the extensive knowledge of all the "ologies" as is apparently now the fashion, seems to be overburdensome, and only to be obtained during the limited time at the student's disposal at the expense of the more important ground-work subjects.

The late Prof. Sir G. M. Humphry was fond of saying that when men found the microscope they lost their commonsense, i.e., they were taught to depend on apparatus and extraneous aids rather than to cultivate their own powers of observation. No one would deny the value of the laboratory modern methods in medicine, but to expect every student to train as an expert in all branches is to set him a heart-breaking and hopeless task, and tends to superficiality and not thoroughness.

No, sir, it seems to me that a less extensive, but sound training should suffice and enable a man to qualify, and then, having qualified, let him, if he has the time, taste, and means, go further, and become as erudite and skilled in the more abstruse intricacies and special branches of medicine as he pleases.

As a G.P. I prize in the highest degree the training Guy's gave me. In those days the demands of the curriculum were far less extensive, but I was turned out with a sufficient knowledge to deal with the ordinary case, and also to avail myself when in doubt of the help of a specialist in one or other branch of medicine.

To my mind the present curriculum as sketched in your pages seems calculated rather to swell the ranks of the Harley Street oracles than to meet the needs and capacities of ordinary men like myself who are regulated to the ranks of the humble, hard-working, busy G.P.—Yours very faithfully,

A. H. GODSON.

Oldham,
October, 1923.

Improvements in the Gazette.

DEAR SIR,—I notice that you are proposing to make some alterations and improvements in the GA-

ZETTE. May I suggest that you put all the advertisements either at the beginning or the end? When reading an account of an interesting clinical lecture it is a little irritating to turn over the page and be suddenly confronted with an advertisement page about someone's tooth paste or the advantages of some Insurance Company.

I have no doubt that these advertisers have to pay you more for giving extra prominence to their particular commodity, but I think that a really respectable journal such as the GAZETTE ought to have a little more consideration for its readers, and should be able to ignore the extra advertisement income in order to keep up its otherwise excellent reputation.—Yours faithfully, G. McGREGOR.

2, Brading Avenue,
Eastern Parade, Southsea,
October 17th, 1923.

A Guy's Warrior.

DEAR SIR,—I beg to enclose a cutting of the *South Pacific Mail* of this City, which is published weekly, and this particular number gives some account of the events that led up to the Independence of Chili, the 18th and 19th of September being the two national feast days.

As you will see, an old Guy's man took an active part in the campaign on the side of the patriots, and afterwards he must have practised and lived to a good old age, having died here in Valparaiso in 1869.

I thought it might be of some interest to readers of the GAZETTE, if you think it worth while to publish these facts, to show how far afield and with what distinction the name of Guy's is always associated.—I am, Yours very sincerely,

STANLEY M. WELLS.

Valparaiso,
September 15th, 1923.

"An equally onerous part in the campaigns of those distressful years was borne by British doctors; members of a profession whose abnegation is, perhaps, never more evident than in the non-spectacular, sad incidents of the battlefield.

Prominent among them was Augustus Nathaniel Miers Cox, who, born in Hereford in 1785, and after studying medicine at Guy's, served as a surgeon in the Russian and British Navies. Coming to South America he spent some time in both Uruguay and Buenos Aires, where he seems to have acquired much fame, for in 1814 he was called to attend the Marquess of Villa Palma in Santiago. Here he seems to have been inspired by the patriots' fight for liberty, for he enrolled in the army and followed their fortunes through all the campaigns of the south. In 1819 he was made a citizen of the nation and filled many important medical posts till his death in Valparaiso in 1869.

Dr. John Adam Green had been present at Waterloo as a surgeon in the British Army. Arriving in Chili in 1816 he was immediately included in the patriot ranks as a surgeon and was on duty at all the subsequent battles, including the decisive field of Maipu. He then returned to the peaceful life of general practitioner, till, like the proverbial war horse, he returned to the army once more to take part in the campaign to Peru in 1839."

A Plea.

"Junior Pro" presents an attitude not unknown in modern sex psychology and certainly not very unusual among those who have the right to style themselves as she does. It is a pity that she does not consider men worthy of much consideration, for she thus casts aside the opportunity of developing a very fascinating and interesting study. It is certain that the champions of mere man will not let her remarks go unchallenged, and in all probability the replies will be in a similar note.

Mr. Ward Clerk will point out that the occasional fall of the theatre box and the crash of its contents is a pleasant change after the frequent tinkle of thermometers on the ward floor. He will argue that his physical weakness arises from the lack of opportunity of developing the wrist-strangle-hold so commonly practised by probationers in order to register one more victory on the ink-besmeared chart fixed above the patient's head. The more thoughtful will ask how often a junior pro. "takes" a surgeon on his round, so as to be in a position to comment with any authority and fairness upon the answers of ward clerks. Doubt might thus arise of the right of the authoress to use such a nom-de-plume as she has chosen. As for self-abnegation, he will say that the term held no meaning for him until he saw how a blue frock could reduce to a state of abject crawliness even the haughtiest of junior pro's.

The Take-in Firm will be equally biting and are sure to reply that if, at night, there are any patients still asleep after Nurse J. P. has been in the ward kitchen, nothing less than Gabriel's trumpet would awaken them.

The A.H.S. will contend that he has as much right to go to *his* ward at night and sit at his ease as any nurse to while away her time in mending stockings or knitting the latest thing in jumpers. He will point to the many fair reputations which have been destroyed by those whose scandal—like Junior Pro's—consists of "invented things"—a common pastime, apparently, in the Nurses' Home about meal times. Moreover, he will argue that, if a newly acquired qualification can, like a Sergeant-Major's voice, straighten the spine and tilt the chin, it is a weak weapon for this purpose compared

with the recent acquisition of a submandibular appendage. Authority sits on his head no more heavily than upon a cap made six inches across (?) to which strings are attached 1½ inches (?) in front of the corners! And for the development of a haughty intonation nothing can compare with the training obtained by a nurse by constant practice upon a ward telephone.

The bitterest note, however, will be struck when the House Officer contents himself by replying to Junior Pro. in the words of Pope :—

"Who most to shun or hate mankind pretend,
Seek an admirer, or would fix a friend."

This undoubtedly will be the tenor of the replies, and thus the bitter contest may be prolonged. Why has this attitude arisen? How is it to be dispelled? The answer to the first question is that in a large hospital where both sexes are working together few facilities are provided for bringing them together for some common pleasure. Although both have their societies they are exclusively for their own members, so that each class is able to judge the other from one standpoint only, and a prejudiced opinion is the result. This gives the clue to the remedy. Seek some organisation which is open to both nurses and men and, having found it, develop and support it. Is there one such in Guy's? There is—The Musical Society.

Let this, then, be a plea for the encouragement and support of the Musical Society. The harmony which exists between its members is equalled only by the harmony produced by them in their musical efforts. If the cynic replies that this may not mean much, let him attend one of the meetings of the Society and judge for himself. Practices are held in the Court Room every Monday, as follows :—

Orchestra—8—9 p.m.
Choir—9—10 p.m.

The Society have secured the valuable services of Mr. H. Templeman as Conductor. He was recommended by Sir Landon Ronald and chosen from 18 applicants. He much impressed the members by his able conducting at the first practice, which was held on October 22nd. He proved himself an excellent all-round musician, and the eighty members present were delighted with the success of the opening meeting.

All who are interested in music—instrumentalists and vocalists—should join the Society. The programme for the ensuing season is—

"The Revenge"—C. V. Stanford.
"Trial by Jury"—Gilbert and Sullivan.

The subscription is one shilling for performing members. Owing largely to the fact that with the Musical Society is incorporated the Nurses' Choral Society, affiliation to the Clubs' Union is not possible. The Society therefore depends financially upon the generosity of members of the Medical, Surgical, and Nursing Staffs and others interested in Hospital music. Donations are, therefore, always very acceptable and should be sent to the Hon. Treasurer or the Hon. Secretaries.

Then give the Musical Society the support it deserves, and thus forge one more link in the stout chain of hospital life and eliminate for ever such sentiment as is expressed in the article by "Junior Pro." Indeed, that spirited young lady would be well advised to investigate the subject of men before condemning them. Then, perhaps, as the butterfly has said, "I was a worm until I won my wings," so may a certain head nurse of the future remark, "I was a Junior Pro. before I got my strings."

Pass List.

Royal College of Surgeons.
L.D.S.
First Professional Examination.

Part I.

Mechanical Dentistry.

N. L. Barber.
L. Barclay.
I. E. Brown.
G. L. N. Burden.
S. Casper.
H. E. Edney.
W. G. Fenn.
W. C. G. Ford.
R. D. G. Gain.
S. R. Howcroft.
W. R. Jenkins.
G. J. T. José.
J. W. Kingston.
B. S. Mead.
C. E. Pedley.
V. C. Penberthy.
R. E. Rix.
E. N. Stevens.
F. C. Tomlyn.
W. L. Benson.
C. B. Boyd.
T. S. Davidson.
M. Farwell.
P. Gerrard.
J. N. Hamman.
E. A. Moss.
G. N. Lewin.
R. C. Lillicrop.
A.E. MacLagan.
C. M. Ross.
E. H. Sears.
A. E. Treweek.
F. S. Warner.
V. W. L. Wells.
E. C. Woodhead.
G. G. Grainger.

Part II.

Dental Metallurgy.

N. L. Barber.
L. Barclay.
G. L. N. Burden.
S. Casper.
T. G. C. Emberson.
A. E. Farara.
W. C. G. Ford.
R. D. G. Gain.
S. R. Howcroft.
W. R. Jenkins.
G. J. T. José.
J. W. Kingston.
B. S. Mead.
C. E. Pedley.
R. E. Rix.
C. W. Siddle.
E. N. Stevens.
F. C. Tomlyn.
J. D. J. Visser.
M. Wolman.
M. Bewlay.
H. Brown.
O. S. L. Campion.
S. I. Cohen.
E. B. Corry.
D. Davies.
H. Falk.
G. Fellows-Smith.
E. Fulford.
M. Gerson.
A. E. Grace.
V. L. L. Hall.
R. H. Hancock.
G. J. Hollis.
K. S. Keele.
W. H. Naylor.
G. W. Oliphant.
S. E. Post.
C. A. Rumball.
J. Stazunsky.
R. G. Swiss.
H. E. C. Terry.
J. White.
J. F. Wege.
N. C. Yendell.

Part III. (a).

Anatomy and Physiology.

T. S. Davidson.
J. F. Wege.
F. D. Manners.
H. C. Lawrence.
W. D. Pitt Payne.
H. H. Revill.
L. A. Steel.
W. J. Badenhorst.
E. J. B. Curtis.
N. Goldthorpe.
J. P. Hartman.
J. Hull.
A. S. Levy.
E. G. Parsons.
L. Weinberg.
G. E. Glazebrook.
L. Cowlishaw.
J. S. Crapper.
A. C. Evans.
H. Gillett.

Part III. (b).

Dental Anatomy Physiology.

N. Goldthorpe.
J. Hull.
N. Parkinson.
A. Perkins.
A. R. H. Bennett.
H. B. M. Cahill.
A. E. Cave.
R. S. de Bruyn.
R. L. Denny.
J. W. Finnemore.
W. H. Foy.
G. W. Gathergood.
E. M. Harries.
W. C. Head.
F. F. Lowein.
A. C. Luck.
S. A. MacLaren.
W. H. Meissner.
J. R. A. Moore.
J. G. Nelson.
L. G. Pickett.
H. M. Pimm.
F. St. J. Powley.
W. Rowland Hill.
S. Thomson.
F. H. B. Tofts.
W. F. C. Tucker.
L. P. Tupling.
E. Crocker.

Guy's Hospital Pupils' Physical Society, 1923-24.

PROGRAMME.

Nov. 1.—Clinical and Pathological Meeting at 8 p.m.
President: Mr. M. Jackson.

„ 15.—Paper by Mr. Wornum; at 5 p.m. Empyema.
President: Mr. N. L. Eckhoff.

„ 23.—Clinical Meeting with the Medical and Physical Society of St. Thomas's Hospital at St. Thomas's at 8 p.m.

Dec. 6.—Clinical and Pathological Meeting at 8 p.m.
President: Mr. M. Mitman.

1924.

Jan. 10.—Paper by Mr. Craib, at 5 p.m. B.I.D.'s.
President: Mr. E. R. Boland.

„ 24.—Clinical Meeting with the Medical and Physical Society of St. Thomas's Hospital at Guy's at 8 p.m.
President: Mr. N. L. Lloyd.

Feb. 7.—Joint Meeting with the Physiological Society at 5 p.m. Discussion on Rickets: Opening papers by Mr. G. T. Henderson and Mr. J. Wiseman.
President: Mr. W. R. Spurrell.

„ 21.—Special Meeting at 5 p.m. Sir Bernard Spilsbury, M.D., will read a paper.
President: Mr. R. Hale-White.

„ 28.—Clinical and Pathological Meeting at 8 p.m.
President: Mr. L. G. Housden.

March 6.—Paper by Mr. G. C. Millis; Diseases of Famous Men.
President: Mr. G. T. Henderson.

„ 20.—Joint Meeting with the Dental Society at 5 p.m. Discussion: The effect of modern civilisation in the development of teeth.
President: Mr. J. A. Currie.

April 3.—Clinical and Pathological Meeting at 8 p.m.
President: Mr. G. C. Millis.

„ 17.—Treasurer's Prize Essay at 8 p.m.
President: Mr. R. Hale-White.

May 1.—Debate; at 8 p.m. Eugenics and Birth Control.
President: Mr. W. H. Craib.

Rugby Football.

GUY'S v. GLOUCESTER.

We nearly beat Gloucester at Gloucester, on Saturday, October 13th, but not quite. What a world of difference there is between the almost and the accomplished fact. Gloucester in fact beat us. They got a penalty goal and one try and we a dropped goal, 6 points to 4. We had a good side out and so had Gloucester, but they were a man short all the second half. T. Millington, the home Captain, opened the scoring with a fine long penalty goal. It was just before the interval that E. H. W. Collins got hurt, but their seven forwards did remarkably well. As far as our own men are concerned the pack was excellent. E. E. Neser put in any amount of good work and in the heavy work none was better than G. G. T. Tregarthen. One would like to see the forwards just as active, but with rather more weight. Once Steyn brought down S. Brown well when a score appeared certain. Then T. Voyce, the International, made an opening for F. Ayliffe, another well-known Gloucester forward to throw himself over for a try. Now one saw H. Graham Davies and C. L. Steyn in action, and right well they tried to put their side on terms. It was Steyn, as a matter of fact, that dropped our goal, and a good drop it was too. As a team the XV. can be heartily congratulated on a very fine performance. Each man did his utmost and as much as he was able, and not the least to be praised is W. Meissner, who has no easy task to perform. To finish with, the Captain, J. G. Van Schalkwijk, must be awarded every credit for his share in a very worthy display.

Guy's Team.—W. Badenhorst, G. R. Mostert C. L. Steyn, H. Graham-Davies, J. W. Finnemore, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, F. Bekker, G. C. Cameron, B. G. Scholefield, De Wet Vorster, G. G. T. Tregarthen, J. W. Schabort.

GUY'S v. BRISTOL.

This, the first home match of the season, took place at Honor Oak Park on Saturday, October 20th. Both sides were at full strength, with one exception, Bristol arriving without R. C. Pickles who is on the

injured list. J. A. Tucker took his place. One can say at once that Bristol did not suffer from this change as Tucker played well. J. B. Spence made a first appearance as partner to Graham-Davies. One cannot criticise a first performance, but there seemed much to admire in his work and little to cavil at.

A great attendance rolled up and the usual members of the Staff, who always support the Rugby games, were in the stand. Old Guy's men, Sir John Atkin, Dr. R. M. Randall of Beckenham, Guy's Captain, 1883—84, Surgeon-Captain Wernett, R.N., and many others too numerous to mention were also present. They were treated to a very hard game and Guy's did well to lose by so small a margin to Bristol—a team of men, not only very skilful, but also physically fit and hard. Their good condition undoubtedly told, but if you consider the different surroundings of the Hospital men one must congratulate them on lasting so well.

The first try was unfortunate, C. L. Steyn and W. Badenhorst went for a lofty punt, they smashed into each other and Richardson, a Bristol forward coming up with all sail on, secured the ball and fell over the line. Hard was the scrummaging. N. M. Holloway did well, and in the loose bursts none was better than B. G. Scholefield. G. G. T. Tregarthen's strength is most useful in the hard work, but the Bristol forwards were stronger. A couple of penalties drove Bristol back, and a third one saw E. E. Neser land a neat goal. Just about 5 minutes later, a perfect round of passing and G. R. Mostert burst for the line. Still our forwards were being bustled, and from a line out a Bristol man hit the ball back; luckily it was fielded—one says luckily, for it is dangerous play, and after clever handling Quick forced himself over for an unconverted try, making scores level.

The second half was much in our half. Meissner did his job well considering the power of the opposing pack. J. G. Van Schalkwijk's kicking was great. Graham-Davies did well in attack and defence. The only score was a dropped goal to Bristol. Thus, we lost by 10 points to 6. W. Badenhorst, at full back, was very steady. He might be a bit quicker without unduly hurrying himself.

Guy's Team.—W. Badenhorst, G. R. Mostert, J. B. Spence, H. Graham-Davies, C. L. Steyn, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, B. G. Scholefield, F. Bekker, G. G. T. Tregarthen, J. W. Schabort, G. C. Cameron, H. De Wet Vorster.

Hockey.

GUY'S v. R.N.C. GREENWICH.

Played on Wednesday, October 17th, at Elmers End, this match resulted in a win for the Hospital by 3 goals to 1. The game was played at an extremely fast pace throughout. Guy's had the best of the game in the first half, but owing to their weakness in front of goal and the excellence of the opposing goalkeeper, nothing had been scored at half time.

On resuming, the Naval College soon obtained a goal, due to a misunderstanding between two of the Hospital defence. From now on the Hospital pressed continuously, but for a long while they could not score, the shooting being extremely poor and erratic, and the R.N. College defence packing their circle with great success. At last, however, Schollum scored for the Hospital, and this was quickly followed by two more goals by Swiss and Catchpole. Guy's continued to press till the end, but could not score again.

Of the Guy's team, Dunnill in goal did the little he had to do quite well; however, he should learn to clear quicker once he has stopped the ball. The backs were excellent, especially Awdry, who seemed to be everywhere and whose tackling and clearing were very clean. The half line all played well. Kempe on the right was, perhaps, the best, and he was magnificent both in attack and defence, while Hooper, in the centre, was very sound and fed his forwards assiduously. Lloyd worked tremendously hard, but he would be even more effective if he learned to pass sooner and rather harder. With regard to the forwards, Schollum played up to his usual first-class form and was most ably assisted by Hunt, whose stick play was little short of marvellous and whose very presence seemed to inspire life in the side, his speed and power in passing to the centre are both excellent. Wimbush, in the centre, tried hard, but was slow, and some of his attempts to shoot were almost paralytic. Catchpole played quite well and Swiss has the makings of a very good outside left; with greater speed and more experience he should prove a valuable addition to the side..

Guy's Team.— D. E. Dunnill, M. F. Awdry, E. T. Conybeare, A. C. Kempe, K. Hooper, D. W. Lloyd, W. S. Hunt, J. W. Schollum, H. G. Wimbush, L. Catchpole, R. G. Swiss.

SPECIALITIES.

BABERS, LIMITED, 309, Oxford St., London, W.1.

At the present time, much is being written in the Press on the subject of footwear, and the evil of narrow toes and high heels.

We have before us "A Report on the Baber Method of Shoe-fitting." Messrs. Babers, by their attention to anatomy and the true balance of the foot, claim to have discovered the right way of making shoes. They fit the heel and arch of the foot closely up to the ball of the great toe, which is the widest part, leaving the toes uncompressed and giving the natural balance to the foot, thus ensuring comfort in walking and no fear of deformities, such as bunions, corns, etc.

At any time, Messrs. Babers will be pleased to demonstrate their methods to Medical Men.

Births.

SPENCER—PAYNE.—On the 9th October, 1923, at 98, Colney Hatch Lane, Muswell Hill, to Ivy Sybil (née Spencer-Green), the wife of A. Ll. Spencer-Payne, M.R.C.S., L.R.C.P., L.D.S., a son.

FOSTER—SMITH.—On the 16th September, 1923, at Miri, Sarawak, the wife of Geoffrey T. Foster-Smith, of a daughter.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 922.] November 10, 1923. [Ninepence.

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Passim.

IN his Rectorial Address at Glasgow University last Wednesday Lord Birkenhead stated that this is a competitive age and that the competition becomes keener every day. If he did not use those exact words, that was his meaning, and the distressing fact is being made clear to even lowlier members of society than University Undergraduates. There are three gentlemen, indigenous to the Borough, who used to be seen almost any evening, clothed in places as officers of the Royal Navy. Caps and coats were entirely nautical, though the rest of their dress would have prohibited them from appearing at any but the most undress parade. These gentlemen were wont to entertain large audiences outside their ship (and shovel) with songs accompanied on banjos, and their masterpiece, "Well, here we are then," was the delight and admiration of all. They have now left us, at the best, only for a season. Passing along Maze Pond last Monday night we found their regular site deserted, while their former patrons were resting their backs against the wall facing the Court Room, from which came a truly magnificent volume of noise. After an orchestral overture, some hundred voices began to sing out loud and clear, and we, in the short time that it took us to reach the station, learned some exciting incidents from the life of Sir Richard Grenville It appears that he said (something), and he laughed "ho, ho," also that he sunk "ship after ship, gallon after gallon." (We feel sure that the word used was "sunk," but when so many voices sing at once, one is never too sure.)

We have learned since that this was a practice night of the Hospital Choral Society, and hasten to congratulate the members on the success of their revived Society. Not only are there large numbers of singers, with quite a record in basses, but the orchestra is also numerically strong. The French horn, in particular, had performed some splendid executions, until an injury at football placed him temporarily out of action.

Returning to the College the same evening we surprised yet another blare of music. Truly Hospital life is becoming a festival of song. In the Residents' Room the Niggers were preparing for their Christmas Day of harmony, and from the little that we heard we gather that there is no lack of talent this year.

All these preparations are very pleasing. There is no happier place during Christmas Week than the Wards, and preparations for decorating them are now well in hand. The manufacture of apple-blossom by an elderly

patient with cirrhosis of the liver is not only a pleasant sight to behold, but must, from the very nature of the work, aid in taking his mind from his disease back to the little cottage in the country where he may have been born.

Whether he was born there or not, there are thousands of the little patients of the Hospital who have never seen anything more rural than Dock Head. They live in crowded tenements, they play in the streets, they get knocked over by bicycles, and, taking it all in all, they really do not have all the good things of this world. For these children Dr. Landon originated the "Landon Tea Fund," which enables us to give a party on Christmas Day to some seven hundred guests. Anyone, who has not visited the Out-Patients' Department on a Christmas Day, has missed an opportunity of witnessing pure enjoyment. The rapidity with which these children get the better of their teas, the shouts with which they greet the Niggers, and the noise with which they drown their efforts, must be seen and heard to be appreciated. Very shortly people will begin to tap you on the arm and ask you if you have subscribed to the "Tea Fund" yet. It is a great privilege to be allowed to help this party in some small way, and so, of course, you will subscribe at once, if you have not already done so. But there is more required than that. It appears, on investigation, that as we covet letters after our name, and "A 5" sign-ups and such comparatively unimportant things, the small girl of the Borough sees her life's highest endeavour achieved if she become the proud possessor of a doll. Not, mind you, one of the waxen-faced, human haired, blinking, talking, expensive dolls, but any old thing that can be said definitely to have one end more like a head than the other. Their dolls need only resemble the more human specimens as little as their guys resembled the original Guy. Sister Out-Patients will receive very thankfully all varieties of doll, or, for that matter, toys of any description.

THIS is a proud day for the GAZETTE. For years we have been trying to make this journal one of interest to the members of the Nursing Staff. We would have them read it, write for it, and even look forward to it with some degree of pleasurable anticipation; but, alas, articles from their pens could not be obtained, and we almost despaired. But not quite; for, we thought, if they cannot be induced to write by invitation, prayers or cajolery, perchance they will do so in answer to a direct attack. And so it is that to-day we publish three letters from the Nursing Home. We sincerely hope that many more will be forthcoming, though not necessarily on the same subject.

One letter, which we regret has been crowded out, complained that the emancipation of women was passing all bounds. He asserted, with what truth we know not, that "Junior Pro." was recently seen in the Colonnade, wearing trousers and smoking a pipe!

TO-MORROW, Sunday, November 11th, is Armistice Day and the Fifth Anniversary of the ending of the Great War. The War Memorial Arch will serve to remind us for all time of the great part played by Guy's men in the war, and we were particularly pleased at the idea, started last year, of holding a short ceremony at the War Memorial on Armistice Day. A service will be held again this year at 10.45 to-morrow morning in front of the War Memorial, the ceremony, which will be non-denominational, being conducted by the Rev. A. G. Harris, the Hospital Chaplain. The

Drums of the Guards will be present and a wreath will be laid on the Memorial. Being Sunday, many men will, no doubt, be absent from Hospital, but we strongly urge all those, both students and nurses, who can come up to Hospital, to attend the service and take part in the Commemoration.

A Memorial Service will also be held at the Bermondsey and Rotherhithe War Memorial in West Lane, Mill Pond Bridge, and, in the afternoon, the Mayor and Councillors of the Borough of Bermondsey will visit the new Children's Ward, erected as a Memorial to the men of the Borough.

Of all the Delegates to the present Imperial Conference, General Smuts, the South African Premier, is undoubtedly the most outstanding. It was only fitting that an invitation should be extended to him by the Treasurer of Guy's, where so many South African students have played such a great part. It was with great regret that we heard of General Smuts' inability to visit the Hospital, but those who read his letter, which we print below, will be proud to think of his great interest in the South African students at Guy's.

My Dear Lord Goschen,

Thank you for your kind invitation. I should very much like to have come to Guy's Hospital to make the acquaintance of the many South Africans who are there, but I regret to say that I haven't got a free day before I sail on the 9th.

I am so glad to hear that the hospital authorities think well of the young South Africans who have studied there, and I am sure that those who come in the future will do their best to live up to the favourable report which you have given their predecessors.

With kind regards,
Believe me,
Yours sincerely,
J. C. SMUTS.

On page 452 we print an article, discussing a matter of great importance, in the work which a student should do in the medical wards to fit himself for general practice. Its aims and objects are sufficiently indicated in the article itself, but it is hoped that those of our readers who have had experience of general practice will forward any criticisms they may make as to the scope of the article, such as alterations or omissions in the three classes of investigations.

Notices.

Swimming Club.

The Annual General Meeting was held on October 25th. The following Officers were elected for the coming season:—

President.—Sir Alfred Fripp, K.C.V.O.

Vice-Presidents.—Re-elected, with the addition of H. L. Eason, Esq.

Capt. Water Polo.—J. Simons.

Capt. Swimming.—F. R. Dingle.

Hon. Sec. and Treasurer.—S. E. Theis.

Committee.—Messrs. J. Crow, L. Brown, W. Tucker, R. Schofield, J. D. S. Thomas, A. R. Marsh.

The Annual Dinner of the Club will be held on November 28th, at Maxim's. Sir Alfred Fripp will preside.

Change of Address.

Verney L. Sunderland, L.D.S., 82a, High Street, Tonbridge, Kent.

Sister E. J. Coombs (née Cooper), c/o Mrs. Blake Wallace, 144, Vause Road, Durban, Natal, South Africa.

Dr. Harry Spon, Grand Hotel Miramere, Ospedaletti, Italy.

Appointment.

G. Gill-Carey, F.R.C.S. Eng., Assistant Surgeon, Central London Ear, Nose and Throat Hospital.

GUY'S HOSPITAL GAZETTE.
(Established 1872.)
A Journal of Hospital News, Medicine, Surgery, and Dentistry.
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The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the Gazette can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor.*

Editorial and Publishing Office:—The Counting House, Guy's Hospital, London, S.E.1.

What a Student should do in the Medical Wards to fit Himself for General Practice.

By A. F. Hurst, M.D., F.R.C.P.

The average medical student becomes the average general practitioner. In deciding, therefore, what clinical and laboratory methods the student should be taught in the medical wards it is necessary to consider what a keen and well educated practitioner might be expected to do under the most favourable conditions in a busy general practice. At present insufficient distinction is made between the simple methods which every practitioner should be able to employ himself and those which are either non-essential or too elaborate and time-consuming for the use of the vast majority of men. Many students become qualified without having had sufficient experience in the former methods and without clearly realising how much importance to attach to the latter.

The following lists are drawn up with the object of showing the student from the moment he enters the medical wards what are the essential things (I.) he should learn from the point of view of his future work in practice rather than from an examination point of view, and what investigations (III.) can be reasonably left to the expert laboratory worker. When it is said that a certain examination should be made on every new case, this does not necessarily mean that such an examination should be made in every case in ordinary practice, but the examination should be made in the hospital wards with the object of giving the student sufficient experience of the normal as well as the abnormal. An intermediate group (II.) is formed by those methods which a keen general practitioner can quite well carry out himself if he is specially interested in a special subject, such as blood diseases or insulin treatment, and is prepared to devote sufficient time to it when a senior student or after qualification

Part I.

Essential Investigation.

(1) Accurate history-taking of his own case. The more skilled a student becomes in this, the more will he realise how frequently an accurate diagnosis can be made from the history alone, though it should never be accepted without confirmation by other methods.

(2) Detailed physical examination of all extems in his own cases, and physical examination of those systems showing any abnormality in every other case in his wards.

This detailed physical examination of his own cases should include, in addition to the ordinary examination of the mouth, chest, abdomen and nervous system.

i. Rectal examination (in all male cases, and in female cases with abdominal symptoms). This, of course, should include palpation through the rectal wall of the prostate in men and the cervix and uterus in women.

ii. Examination of the fundus with the ophthalmoscope.

iii. Examination of the larynx with the laryngoscope, ear with the aural speculum, and nose with nasal speculum.

iv. Determination of the systolic and diastolic blood-pressure; this should be repeated weekly in every case.

(3) *Urine.*—

i. Specific gravity.

ii. Reaction to litmus.

iii. Qualitative examination for albumen, sugar, acetone, and diacetic acid.

iv. Quantitative estimation of albumin and sugar.

v. Microscopical examination for crystals, blood, pus, other cells, casts.

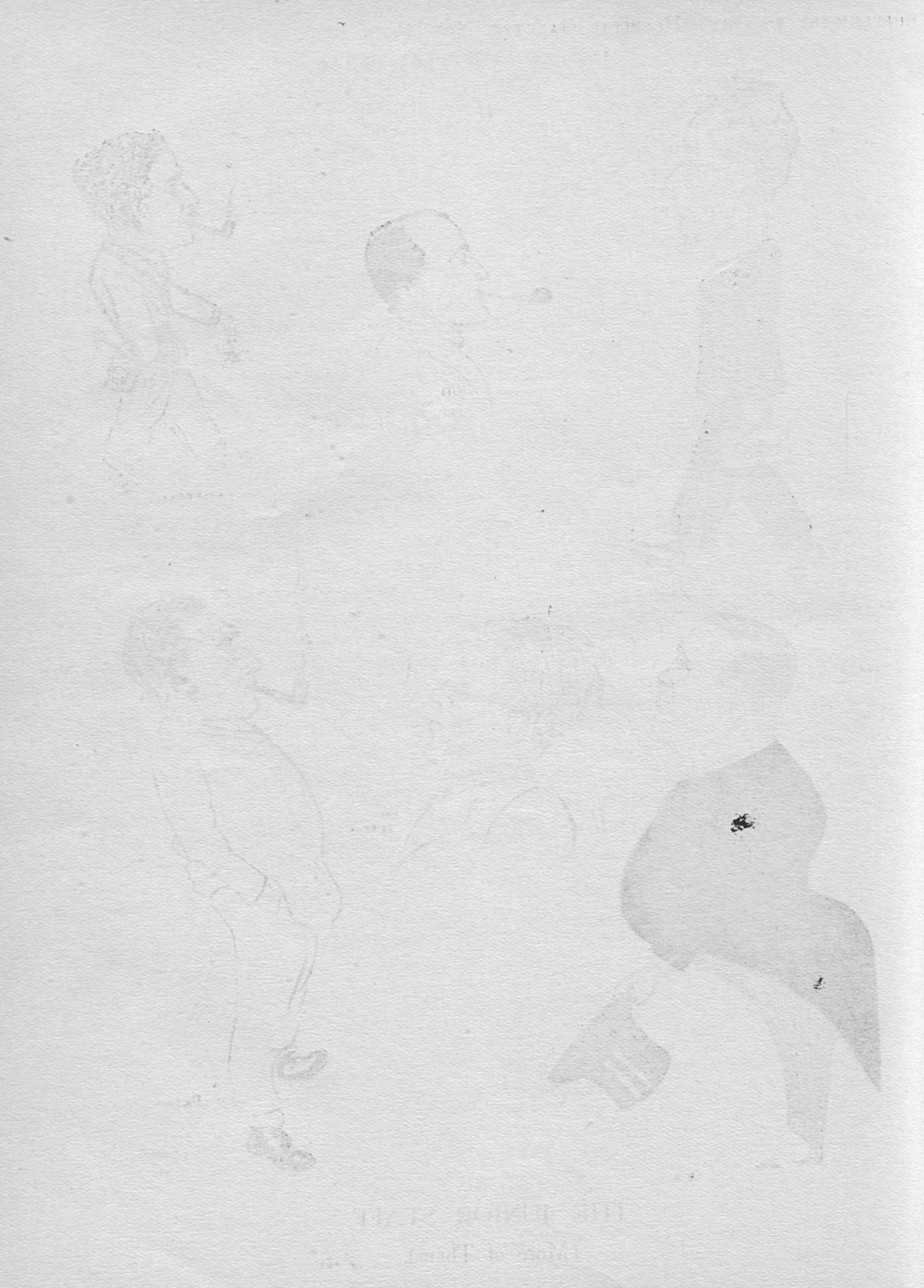
This should be done in every new case, and at least on alternate days in every case showing any abnormalities. A student should make a point of examining microscopically the urine of each case of nephritis under any of his colleagues.

(4) *Fæces.*—

i. Naked-eye appearance of the stool in *every* new case: colour, consistence,

THE JUNIOR STAFF

(More of Them).



mucus, pus, blood, fat excess, obvious food residue. Daily examination in all cases of colitis.

ii. Examination for occult blood by benzidine test in each specimen kept for examination before being sent to Dr. Ryffel's laboratory for confirmation. A series of three is required for diagnostic purposes, and two a week for ulcer cases under treatment.

(5) *Blood.*—

i. Estimation of hæmoglobin percentage in *every* new case. Twice a week in cases of anæmia.

ii. Preparation and staining of blood film in *every* new case, and report of general appearance of red cells and leucocytes. Twice a week in cases of anæmia.

(6) *Sputum.*—Naked-eye appearance.

(7) Blood should be taken from the vein of every patient. This should be done under the same antiseptic precautions as those which would be used for obtaining it for blood culture. The student will consult with the H.P. whether the blood should be sent for a Wassermann reaction, or some bacterial or biochemical investigation. Opportunity should be taken of noting the colour of the serum which separates, in order to form an idea of the normal with which to compare the serum in jaundice and in Addison's anæmia.

(8) *Fractional Test-meals.*—The student should pass Ryle's tube, withdraw the fasting contents, give the meal, the composition of which he should learn, and remove the fractions. He should note their general characteristics—consistence, mucus, bile, blood. He should also learn to pass an ordinary stomach tube or Senoran's evacuator, (a) fasting, 12 hours after a full meal in impacted pyloric distension, and (b) for washing out a dilated stomach.

(9) *Lumbar Puncture.*—Every student should qualify himself to do a lumbar puncture in the wards by performing one in the post-mortem room under supervision. When the H.P. does not wish to do it himself, the clerk of a case, if he has already done one on a dead body, will do it on his patient. But no student will do more than one even on his own case until every member of the firm in rotation has done one. A rota of clerks should be kept for the purpose.

(10) *Exploration of the chest* and *paracentesis abdominis* for ascites.—There is no need for previous experience on the dead body, but otherwise experience of this procedure should be gained in the same way as with lumbar puncture, and a separate rota kept.

(11) *X-rays.*—Every student should make a point of being present at each X-ray examination of his own cases, and at as many as possible of those of the cases of his colleagues.

(12) *Treatment.*—Every student should make himself familiar with the details of the treatment of his patients, and should find out from his H.P. when any special investigation or treatment (sigmoidoscopic, cystoscopic, tapping chest or abdomen, etc.) is to be carried out, so that he may be present to help. He should always attend any operation performed on the surgical side on patients he has seen in his physician's wards.

PART II.

Examinations which a student need not make, but which he may do if he has the time and inclination.

(1) Red and white blood counts. Differential leucocytes count. It is always wise for two students to do a count on the same patient's blood at the same time in order to confirm each other's results.

(2) Cell count and differential count of cerebro-spinal fluid; examination for excess of protein.

(3) Analysis of test-meals.

(4) Blood sugar estimation.

(5) Microscopical examination of sputum, and staining for tubercle bacilli.

(6) Microscopical examination of fæces.

PART III.

Examinations which should be left for the laboratory experts.

(1) Wassermann reaction. All bacterial examinations.

(2) Blood urea; urea concentration test; liver efficiency test; urine diastase index; Van den Bergh's reaction.

(3) Spectroscopic examination of stools for occult blood.

(4) Examination of duodenal contents and bile.

Pass List.

Conjoint Board.

Final Examination.

October, 1923.

Medicine.

*R. H. Amm.
*C. A. Probert.
C. S. Hallpike.
*N. L. B. V. Eckhoff.
*R. N. L. Still.
J. N. Alexander.
C. W. Greenway.
N. W. MacKeith.
*D. Vaughan.
*O. G. Morris.
*G. T. Henderson.
H. J. W. J. Westlake.
W. R. Spurrell.
J. A. F. Denyssen.
R. D. Owen.
J. F. Payan.
S. C. Rowbotham.

Surgery.

W. F. Payne.
C. S. Hallpike.
*N. L. B. V. Eckhoff.
J. Atkin.
*R. M. L. Still.
H. G. Close.
E. F. Hewlitt.
M. Rubinstein.
*C. Ive.
*F. N. Newell-Roberts.
*T. Wooldridge.
*C. E. Keast.
*J. J. Lewinstein.
*P. M. Moffatt.
*E. H. Koerner.
*G. B. Kirkland.
*R. B. Fawkes.
*A. Broido.
*G. O. Mitchell.
L. E. Owen.
M. B. Seng.
H. Maclachan.
R. R. Macintosh.

Midwifery.

R. F. Smith.
M. Rubinstein.
A. Tom.
A. Canard.
J. R. Vermooten.
M. Bannounah.
W. F. Payne.
*N. L. B. V. Eckhoff.
N. W. MacKeith.
T. G. W. Parry.
M. Taylor.
W. A. Mill.
E. I. Liberman.
R. E. Robinson.
H. Levit.
C. K. Colwill.
W. H. Bradley.
C. H. C. Toussaint.
I. M. Benjamin.
S. W. Phoon.
M. H. Jacobz.
A. Jowell.
S. A. Leader.
F. J. Levy.
A. T. Fripp.
G. S. Landon.
L. F. Davies.

*Have now completed the Examination.

1st Examination.

Chemistry.

G. E. King-Turner.
S. K. Arnold.
U. Goldberg.
L. H. Ide.
F. T. Wilkinson.
H. F. J. Willis.
J. J. Sanders.
E. B. Corry.

Physics.

H. C. Muirhead.
J. W. Ellis.
U. Goldberg.
L. H. Ide.
F. F. Wilkinson.
C. Hofman.
W. F. Fuller.
C. Skinner.

Elementary Biology.

E. M. MacLachlan.
H. C. Muirhead.
G. H. O. Thomas.
L. Barclay.
R. E. Rix.
T. Sherman.
R. G. Sowter.

2nd Examination.

Part I.

Anatomy and Physiology.

T. C. Pain.
A. H. Bruce.
M. L. Hutchinson.
P. J. Gonsalves.
*J. R. W. Richardson.
P. M. Deville.
*A. G. Ensor.
S. Slotar.
E. Robinson.
S. D. H. D. Wallis.
*B. Kaplan.
*R. Jarman.

*Anatomy only.

Part II.

Materia Medica and Pharmacy.

A. H. Bruce.
G. W. Murray.
H. M. H. Ashwin.
H. C. Lee.
R. A. Grant.
E. T. Kitchin.

Society of Apothecaries of London.

October, 1923.

Surgery.

*R. S. Chambers.

Medicine.

*E. N. C. Annis. *R. S. Chambers.

Forensic Medicine.

*E. N. C. Annis. *R. S. Chambers.

Midwifery.

H. T. Chiswell.

*Have now completed the examination.

Primary Examination.

October, 1923.

Parts I. and II.

Anatomy.

T. C. Pain. S. Slotar.

Physiology.

T. C. Pain. S. Slotar.

Papers by Guy's Men.

Sir Arbuthnot Lane, Bt., M.S., F.R.C.S. An Address on Chronic Intestinal Stasis and Cancer.—*B.M.J.*, 1923, ii., p. 745.

F. Gowland Hopkins, D.Sc., F.R.S. Cameron Prize Lectures on the Present Position of the Vitamin Problem.—*Ibid.*, p. 748.

Alan H. Todd, M.S., F.R.C.S. Arthroplasty: A Critical Summary of a Discussion at a Meeting of the International Society of Surgery.—*Brit. Journ. Surg.*, xi., 1923, p. 319.

A. Ralph Thompson, F.R.C.S. A Case of Epispadias Associated with Conplete Incontinence treated by Rectus Transplantation.—*Brit. Journ. Childr. Dis.*, xx., 1923, Nos. 235—237, July—September.

Pancreatic Cysts and Pseudo-Cysts.

CLINICAL LECTURE BY R. P. ROWLANDS, M.S., F.R.C.S.

GENTLEMEN,—I want to make this difficult subject as easy as possible for you. As Sir Berkeley Moynihan says:[1] "The term 'pancreatic cyst' has been used to describe any fluid tumour in, or associated with, the pancreas, though such tumours differ widely in causation, position and clinical features." He then gives the following classification:—

1. Retention cysts.
2. Proliferation cysts
   - (a) Cystic adenoma
   - (b) Cystic carcinoma.
3. Hydatid cysts.
4. Congenital cystic disease.
5. Hæmorrhagic cysts.
6. Pseudocysts.

Effusions[2] into the lesser sac of the peritoneum were for long mistaken for pancreatic cysts, partly because the fluid withdrawn from these pseudo-cysts often contained pancreatic secretion and partly because the pancreas formed a part of the wall of the cyst. Jordan Lloyd[3] first drew attention to the true nature of the so-called cysts which followed injuries of the upper part of the abdomen. They generally take the characteristic shape of the lesser peritoneal cavity and, if the pancreas has been injured, their fluid contents may have "the property of converting starch into sugar." Dr. McPhedran[4] recorded an interesting example of a true pancreatic cyst causing a false cyst by inflammatory effusion into the lesser sac. Mr. Kellock[5] described another instance of "traumatic pancreatic pseudo-cyst" and referred to seven more. In four out of these eight cases the injury was a kick from a horse. Mr. W. H. A. Jacobson and Dr. Newton Pitt recorded a very good instance of false pancreatic cyst successfully treated by incision and drainage.[5] They also refer to and summarise 30 cases[6] and mention an instructive paper by Mr. Cathcart[7] where he deals with 13 cases.

I have two cases I want to describe to you to-day.

The first is that of a little boy, aged $8\frac{3}{4}$ years, who left Hospital last week having recovered from a false pancreatic cyst. Eight weeks ago he was injured by a bicycle, the carrier of which hit him in the front of the abdomen. He was taken in an unconscious condition to a hospital, but was discharged two days later, nothing abnormal being noticed in the abdomen. Nevertheless, he wasted very much and had several attacks of vomiting and looseness of the bowels. He was admitted to Guy's on September 19th, 1923, and a swelling was then noticed for the first time in his epigastrium. It was the size of a cocoanut, and occupied the greater part of the epigastric, umbilical and left hypochondriac regions, extending downwards below the umbilicus. The upper and greater part of it was dull, the dulness being continuous with the liver dulness. The lower part gave stomach resonance and splash. It moved freely with respiration and could be felt from behind and, bimanually, through the left loin, but there was resonance in the outer part of this space, behind and in front. The lower edge of the liver was very prominent in the epigastrium. The temperature and pulse were normal. The X-rays did not help much but showed that the stomach was pushed to the left and that the diaphragm was not elevated. There was some diffuse opacity in the situation of the swelling. Diagnosis: Traumatic effusion into the lower sac. An incision was at once made in the left epigastrium and the diagnosis confirmed. The lesser omentum bulged and was bluish in colour. It was incised and a large quantity of slightly blood-stained fluid evacuated; this was examined by Dr. Ryffel and found to contain pancreatic ferments. The pancreas was felt behind the cyst and seemed to be normal. A drainage tube, $\frac{1}{4}$ inch in diameter, was secured in the cavity, in an air-tight manner, and left in for three days. The patient made a good recovery and went to a Convalescent Home a fortnight after the operation. There was still a very slight discharge of clear, non-irritating liquid from the wound.

Case 2.—I will also describe very briefly an extraordinary case in which bile escaped into the lesser sac of the peritoneum. The patient was a lady, aged 42, whom I saw with the late Dr. Brookhouse, of Bromley, in 1912. Sir Herbert Allingham had removed her gall-bladder, containing 40 stones, in 1905, but she continued to have frequent attacks of colic, never lasting more than 20 minutes and never causing jaundice. At last she consented to another operation which proved to be very

difficult owing to hæmorrhage and extensive adhesions. I found and removed three gall-stones from the common bile duct and a tube was passed down towards the incision in this duct, but not into it. This was clearly a mistake and led to the subsequent trouble. After the operation the patient had a bad night and looked ill next morning. The temperature was 100·8, pulse 140 and respiration 40; the pulse remained quick for some days. Two days later she was faint and had an intermittent pulse of 150 (temperature 101, respiration 36), and looked very ill. She was thought to be suffering from cardiac failure and injections of digitalis and strychnine were given. The abdomen was supple, only slightly distended, a little tender and full in the left hypochondrium. The next morning, when Dr. Brookhouse removed the tube, a large amount of bile escaped and continued to do so during the day, clearly showing that the tube had not been draining the common bile duct satisfactorily. The patient was better for several days—the pulse coming down to 90—but five days later the symptoms returned. There was diarrhœa and fainting attacks, with an intermittent pulse. There was also pain in the left flank which was distended and rigid, and a large rounded swelling was felt and thought to be a collection of fluid, in the lesser sac of the peritoneum. Another operation was carried out 13 days after the first one, and a very large quantity of altered bile was drained away from the lesser sac through the gastro-colic omentum. The patient made a rapid recovery. It was thought that the collapse, supposed to have been due to cardiac failure, was really caused by over-distension of the lesser sac of the peritoneum, with irritation of the cœliac plexus.

Symptoms.

History.—False pancreatic cysts or effusion into the lesser sac nearly always follow a definite injury to the upper abdomen. They usually occur in men, who are more liable to injury than women and children. It is probable that the pancreas is lacerated by the injury, causing extravasation of blood and pancreatic juice into the lesser sac. After a period of collapse, following the injury, the patient apparently recovers, but gradually develops symptoms again and a definite tumour is found in the epigastrium, usually within a month of the injury. There is a sense of pressure and fullness in the epigastrium and pain, which is generally worse after meals and is often relieved by vomiting. This pain is frequently severe and radiating and has been described as cœliac neuralgia; it is often associated with collapse. Usually the bowels are constipated, but there may be attacks of diarrhœa, occasionally with blood in the stools which may also be fatty and contain undigested muscle fibre. There is sometimes marked dyspnœa from pressure on the left lung. Almost invariably there is very rapid and severe wasting and anæmia. The temperature is slightly raised, usually about 100, and the pulse is quickened.

Signs.—A rounded, tense, elastic or fluctuating swelling is noticed in the epigastric, umbilical and left hypochondriac regions. This is generally dull on percussion and may give a thrill. It can usually be felt bimanually through the loin. Generally the resonance of the stomach is above the swelling and that of the colon below it, but sometimes, as in my first case, the stomach is displaced downwards, the swelling projecting forwards through the lesser omentum, sometimes the stomach is in front of the swelling at times resonant and splashing. As a rule the swelling is fixed or hardly moves at all on respiration but, in the early stages, it may move freely, as in Case 1. In late cases suppuration may ensue with high fever and leucocytosis; sometimes sugar is found in the urine, from interference with the pancreas.

Diagnosis.

This is not always easy. I have known true and false pancreatic cysts mistaken for left hydro-nephrosis; cystoscopy with the aid of indigo carmine or urethral catheterisation should settle this point. A cyst, or blood cyst, following injury to the spleen, does not usually extend so far to the right as does effusion into the lesser sac of the peritoneum and sub-diaphragmatic abscess causes more elevation of the diaphragm, as shown by the X-rays. X-rays may show opacity and, used after an opaque meal or enema, they demonstrate the relationship of the stomach and colon to the cyst. Distension of the stomach or of the colon with gas may also help materially in this way.

The distinction between true and false cysts is chiefly made by the definite history of injury which practically always causes a false cyst but, as a rule, the diagnosis cannot be certainly established before operation and mi-

croscopic section of a piece of the wall of the cyst. If the latter is lined with columnar celled epithelium the cyst is truly pancreatic, either adenomatous or carcinomatous.

Treatment.

I shall only concern myself to-day with the treatment of false pancreatic cysts.

Aspiration is never successful for the cyst rapidly refills. It is rarely advisable to try it, for peritonitis has followed from leakage into the peritoneal cavity or injury to the stomach or colon, which may lie in front of the cyst; hæmorrhage and collapse have also followed. Therefore it should rarely be adopted even for diagnostic purposes. Extirpation however practicable it may be occasionally for true, localised pancreatic cysts of the tail or body of the pancreas, is neither practicable nor necessary for false pancreatic cysts.

The only treatment is by exploratory laparotomy, generally through a left paramedian epigastric incision. The diagnosis is then completed and the best approach chosen for incision and drainage, great care being taken not to wound the stomach or colon which may lie, collapsed and empty and perhaps adherent, in front of the cyst; these may be difficult to recognise owing to inflammatory changes (Case 2). *Usually the cyst presents*, as in Case 2, through the gastro-colic omentum: sometimes, as in Case 1, it bulges above the stomach, through the lesser omentum, and is best drained there. Occasionally it bulges below the transverse mesocolon or separates the layers of the mesocolon and pushes the transverse colon forwards in front of it. In these cases it is usually best to approach and drain the cyst through the gastro-colic omentum. The fluid is removed by aspiration or large trocar and cannula with tube attached and then drained by means of a rubber tube fixed in the inverted edges of the cyst wall, in an air-tight manner, by a purse-string suture. In some cases it has been advisable to sew the edges of the incision in the cyst to the parietal peritoneum; in others, especially chronic cases with secondary infection, it is best to drain the cyst or abscess through the left loin, just below the last rib. In some of these cases the anterior incision may be completely closed.

Mr. Caird,[8] acting on Mr. Cathcart's plan of making a counter-opening behind, opened one of these cysts at the back and not through the anterior abdominal wall, as is usually done. The incision was made along the outer border of the erector spinæ just below the twelfth rib and a tube inserted. All will agree with what Mr. Cathcart claims for the posterior incision, viz., (1) that the cyst can here be reached extra-peritoneally; (2) that this incision gives better drainage; and (3) that by it there is less risk of a ventral hernia, but the anterior incision is far better for exploratory purposes, and, moreover, anterior drainage has been found to suffice in most cases. I have seen one pseudo-cyst drained successfully through the anterior part of the ordinary oblique lumbar incision made for the exploration of a supposed hydro-nephrosis.[9] The late Mr. Kellock opened and drained one of these cysts through the lower part of the left side of the chest and through the diaphragm, but a counter-incision had to be made later below the last rib to establish adequate drainage.

Prognosis.

The after-history of any case of true or even false pancreatic cyst reported as cured by drainage must be carefully watched. It is clear that, under certain conditions (e.g., where the cyst is very large, where it has thick walls or has suppurated and, above all, where a duct communicates with the cyst) *recurrence* is almost certain and complete obliteration by drainage probably impossible. False pancreatic cysts if well drained in time do better than true cysts of the pancreas and rarely recur.

Mayo Robson[10] collected the records of 160 operations for pancreatic cysts; 140 of the patients recovered from the operation or were presumed, from the records, to have recovered. Four of the cases were doubtful in this respect. Out of 138 patients treated by incision and drainage 16 died—a death-rate of 11·6 per cent. Out of 13 complete excisions 3 died (20 per cent.); out of 7 partial excisions 1 died (14·3 per cent.).[11]

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2. Operations of Surgery, ii., p. 505.
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5. Operations of Surgery, ii., p. 507.
6. Trans. Med. Chir. Soc., lxxiv., p. 455.
7. Edin. Med. Journ., July, 1890.
8. Edin. Med. Journ., February, 1896.
9. Operations of Surgery, ii., p. 508.
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The London Medical Student.

While examining the shelves of a secondhand bookshop I picked up a small "yellow-back" with a rather crude cover, but the enticing title of "The London Medical Student."

It was written in 1861 by a gentleman who calls himself A. Smith, and is worthy of a few remarks as an example of some of the classic exaggerations which are made use of to please certain of the public. But it is also interesting in that some of it shows a few glimpses of life at the time which are not too touched-up, and there is also some originality. To prove he is at any rate in part truthful the author states in opening that he went so far as to enter as a student at a London Medical School "on purpose to note the propensities of the students."

First the "New Man, who may be known by his clothes which incline to the prevalent fashion of the rural district he has quitted, and the affection he shows for cloth boots or short Wellingtons with double soles and toes shaped like a toad's mouth." He comes armed with dissecting instruments, note-books, pens, nibs, and an elegant apron "which never assumes a true professional appearance until it has been used by some hard-hearted student to wipe down dirty slops on the counter of the lab.," and a great eagerness to devote himself to learning his profession and attend all lectures.

A first letter home is typical:

"My Dear Parents,—I am happy to inform you that my health is at present uninjured by the atmosphere of the hospital, and that I find I am making daily progress in my studies. The mistress of the house at which I am lodging is a pious old lady, and I am very comfortable, with the exception that two pupils live on the floor above me, who are continually giving harmonic parties to their friends, and I am sometimes compelled to request they will allow me to conclude transcribing my lecture notes in tranquillity—a request, I am sorry to say, not often complied with. The smoke from their pipes fills the whole house and the other night they knocked me up, two hours after I had retired to rest, for the loan of the jug of cold water from my room, to make grog with, and a 'Little Warbler,' if I had one, with the words of 'Sally, come up' in it.

"Independently of these annoyances, I get on very well, and have already attracted the notice of my professors, who return my salutation very condescendingly and tell me to look upon them rather as friends than teachers. The students here, generally speaking, are a dissipated and irreligious set of young men; and I can assure you I am often compelled to listen to language that quite makes my ears tingle.

"I have found a very decent washerwoman, who mends for me as well; but, unfortunately, she washes for the house, and the initials of one of the students above me are the same as mine, so that I find our things are gradually changing hands, in which I have the worst, because his shirts and socks are somewhat dilapidated; and the worst of it is he never finds out the error until the end of the week when he sends my things back, with his compliments, and thinks the washerwoman has made a mistake.

"I have not been to the theatres yet, nor do I feel the least wish to enter into any of the frivolities of the great Metropolis. There are a great many temptations here for young men, but I shall avoid them all. I have had several invitations to go to a place called 'Evan's,' but I hear but little good of it; one of the men above me, who visits this place two or three times a week, says our professor of anatomy was there on Saturday night; he might have looked in professionally.

"With kind regards to all at home, believe me,

Yours affectionately,

Joseph Muff."

His first change, however, comes when he is prevailed upon to visit Evan's, which, with the Apothecaries Hall, and the College of Surgeons constitutes the three Fates. It is "That convivial Rubicon which it is absolutely necessary for him to pass before he can enrol himself as a member of the quiet, hard-working, modest fraternity of the medical students of our London hospitals." Here he indulges in an exciting evening amongst equally convivial friends, but his precise hour of arrival home is never correctly ascertained as, having a latch-key, he is the only person who could give any information on this point, but, unfortunately, he never knows himself. More frequently he knocks up the people of the neighbouring house, under the impression that it is his own, but that a new keyhole has been fitted to the door in his absence.

Henceforward the change to a "Medical Student" is rapid, and his attendance at lectures is usually to "display his inventive faculties by cutting diverting objects and allusions with his knife upon the ledge before him in the lecture-room, whereon the new men rest their note-books and the old ones go to sleep." Even coating the ledge with a mixture of paint and sand has no effect, and when wooden ledges are replaced by painted iron ones he scratches off the paint with a nail and is as happy as ever.

Botany was evidently studied by weekly expeditions to such places as Hampstead Heath, Highgate Hill, Wimbledon Common, to collect innumerable flowers and leaves which are usually lost.

We are told, with perhaps the greatest truth in the book:—

"Some real lovers of the study, pale men in spectacles, who wear worsted socks and thick boots, have a waterproof cape strapped up with a tin box, and can walk for ever, collect every weed they drop upon, to which they assign a most extraordinary name, and display it at their lodgings upon cartridge paper, with penny-pieces to keep the leaves in their places as they dry."

The usual habit of the majority of the class, after the first time or two when the enthusiasm has departed, is to get lost at Jack Straw's Castle or the Red House, "unless they go to Kew Gardens by the boat, and then return at once, remaining on board, hiding in the fore-cabin, and only paying their fares from Blackfriars to London Bridge."

After the first year the New Man has become a Medical Student in the full sense of the word, which is shown by the fact that when the day comes for him to leave his house and start for London to be present at the opening Lecture, he has made no preparation for his departure and he says he is not particular whether he goes that day or that day week, which seems to cause some uneasiness to his parents.

His locker, once a model of industry, is devoid of scalpels, forceps, note-books, or preparations, but it is not empty. Its contents are three bellpull-handles, a valuable series of shutter-fastenings, a skull without a mandible, and the original black apron made by his sisters and now but seldom used.

"It must not be supposed, however, that he neglects visiting the dissecting-room. On the contrary he is unremitting in his attendance, and is sometimes the first there of a morning. More especially when he has, to use his own expression, been 'going it rather fast than otherwise' the evening before, and comes to the school very early in the morning to have a good wash at the large sink that is so generously supplied by the hospital authorities, with plenty of water, yellow soap, and a round towel, and refresh himself previously to snatching a little of the slumber he has forgotten to take during the night, which he enjoys very quietly in the injecting-room downstairs, amidst a heterogeneous assemblance of pipkins, subjects, deal coffins, sawdust, inflated stomachs, syringes, macerating-tubs, and dried specimens."

Apart from the suffering under the delusion that anatomy, physiology, surgery, botany, chemistry, medicine, etc., are all studied at once, the author describes the dissecting-room as a sort of general common-room, and, indeed, a favourite resort for refreshment. Various foods are cooked over the dissecting-room fire, but only, we are told, when the demonstrator is staying at his own house and making believe he sees patients from ten to twelve. A crowd of idlers are also described on one occasion as contemplating tapping some preparations and making the "lab-man" drunk on grog made from the proof-spirit, dark-brown brandy and sugar. Which rather conflicts with a remark elsewhere in the book that "We have discarded our joke rather than our propriety." He also allows for his public's lay knowledge in "Two gastocnemii muscles, with the Tendo Achilles (*sic*) cut short, are packed in small fish-baskets and sent to the house-surgeon as a pair of soles, accompanied by a jejunum stuffed with sawdust and tied round at intervals with a ligature of silk to resemble sausages." This in a description of Christmas time accomplishments.

In the second session there is a description of an examination in Latin. Was this so in 1861, or has A. Smith again got the wrong idea? The courteous gentlemen at Apothecaries Hall were not very strict for it was evidently possible to get through by persuading a Latin authority to do your exam. for you after he had taken reasonable precaution so that he should not be recognised after he had been up four or five times!

A description of a "Grinder's" class is not so flagrant as the rest of the book. And we only hope that those gentlemen of to-day who add to their income by coaching will not mind when they are told that:

"The Medical Grinder is possessed of the most varied and eccentric knowledge. In accordance with the taste of the examiners, he learns and imparts to his class at what degree of heat water boils in a balloon; how the article of commerce, Prussian Blue, is more easily and correctly defined as the Ferrosesquicyanuret of the cyanide of Potassium; why the nitrous oxide, or laughing gas, induces people to make such asses of themselves; what you would do if you were called to see a tipsy barber who had cut his throat with a razor, or divided his carotid artery with his scissors; and especially, all sorts of individual inquiries, which, if continued at the present rate, will range from 'Who discovered the use of the spleen?' to 'Who killed cock robin?' for aught we know. They ask questions at the Hall quite as vague as these."

The mnemonics of the worthy Grinders are decidedly curious. The meninges are classified as "the Dura Mater, or Paletot overall; the tunica arachnoidea or dress-coat of fine Saxony cloth; and, in immediate contact, the Pia Mater of five-and-six-penny shirt with linen wristbands and fronts."

But this is not nearly so charming as the topographical method of defining the Abdominal Aorta as Cheapside, its two Common Iliac branches as Newgate Street and St. Paul's Churchyard, and the Middle Sacral Artery given off between them as Paternoster Row.

Hæmoptysis.

A sensation of weight and oppression at the chest, sirs;
With tickling at the larynx, which scarcely gives you rest, sirs;
Full hard pulse, salt taste, and tongue very white, sirs;
And blood brought up in coughing, of colour very bright, sirs;
It depends on three causes; the first's exhalation;
The next a ruptured artery; the third, ulceration.
In treatment we may bleed, keep the patient cool and quiet,
Acid drinks, digitalis, and attend to milder diet.

Hæmatemesis.

Clotted blood is thrown up, in colour very black, sirs;
And generally sudden, as it comes up in a crack, sirs.
It's preceded at the stomach by a weighty sensation;
But nothing appears ruptured upon examination.
It differs from the last by the particles thrown up, sirs,
Being denser, deeper coloured, and without a bit of cough, sirs.
In plethoric habits bleed, and some acid draughts pour in, gents,
With Oleum Terebinthinæ (small doses) and astringents.
Sing hey, sing ho: if you think the lesion spacious,
The acetate of lead is found very efficacious.

Great alarm is felt among the lambs being led to the slaughter when the rumour goes round that one examiner has been failing candidates for not knowing how to make malt from barley. Have we not heard of a real examiner, not unknown to us, who would like to do the same?

Some extracts from advice on "going up":—

"Having arrived at the Hall, put your rings and chain in your pocket, and, if practible, publish a pair of spectacles; this will endow you with a grave look. Should you wear stand-up collars turn them down for the occasion; it is Byronic and gives you an intelligent and hard-working appearance.

"Endeavour to assume an off-hand manner of answering; and when you have stated any pathological fact—right or wrong—stick to it; if they want a case for example, invent one 'that happened when you were an apprentice in the country,' or 'walking the hospitals in Paris.' This assumed confidence will sometimes bother them, more particularly if your examiner should happen to be a new hand."

Interesting also is: "The Examination, *i.e.*, at the College, is altogether a more respectable ordeal than the jalap and rhubarb botheration at the Apothecaries' Hall . . . " also "The inquisitors are altogether a gentlemanly set of men, who are rather willing to help a student out of a scrape rather than 'catch question' him into one."

In conclusion, Mr. Smith says, "We have endeavoured to show the medical student as he actually exists—his reckless gaiety, his wild frolics, his open disposition. That he is careless and dissipated we admit, but these attributes end with his pupilage; did they not do so spontaneously, the up-hill struggles and hardly-earned income of his laborious future career would, to use his own terms, 'soon knock it all out of him!'" Mr. Smith!

R. C. B.

Nursing News.

A most enjoyable afternoon was spent at the Nurses' Cottage, Honor Oak Park, on Wednesday, October 10th, the occasion being the playing off of the Final of the Fagge Cup Lawn Tennis Championship, and a Ladies' Match, Mrs. Fagge's Team v. the Finalists and Semi-Finalists of the Cup players.

The Cottage and grounds looked charming in spite of the somewhat inclement weather, and between 60 and 70 guests assembled in answer to Matron's kind invitation.

We were very pleased to see members of the Ladies' Committee present, including Mrs. Cosmo Bonsor, the Hon. Mrs. Molyneux, Mrs. Fagge, Mrs. Mollison, and Mrs. Scott.

The game started promptly at 2 o'clock, and proved one of the most exciting matches ever witnessed at the Cottage.

Sister W. Johnson eventually defeated Nurse E. Taylor after a hard struggle. Up till the very last game it was an open question as to who would be victorious. Both players were extraordinarily steady, and it was only when one of them managed to manoeuvre the other out of position that a well placed shot won a point. Nurse Taylor's left-handed drives evidently puzzled her opponent at first, for the games stood at 5—2 in the first set, in Nurse Taylor's favour, before Sister Johnson got really going, and won the set at 8—6. The latter's steadiness on her back hand was the great feature of the play, ball after ball being sent to her left hand only to be returned as surely each time.

The second set was won by Sister Johnson by 6 games to 4. It was a great fight, and

both players are to be congratulated on giving the spectators such a thrilling match to watch.

The Ladies' Match, which was very closely contested, and much enjoyed, resulted in a win for the Ladies, by the narrow margin of one game, sets being equal.

The players were—Mrs. Mollison and Miss Lyell, Mrs. Scott and Miss Burns, Nurses Stubbs and Taylor, Sisters Cornwall and Johnson.

The presentation of the Cup next took place, Matron, in calling upon Mrs. Fagge to present it, saying how pleased she was that Mrs. Fagge could be with us to present the Cup this year, and hoping she knew the amount of pleasure it gave all the tennis players to compete for it year by year, the competition being most keen in spite of the numerous difficulties to get ties played off, owing to the 'awkward off-duty times.' She also wished to thank the Hon. Mrs. Molyneux for her generous gift of £50 towards paying off the debt on the Cottage, a gift as unexpected as it was delightful, and tendered her thanks to Mrs. Mollison for presenting the 1st and 2nd prizes to the Cup Finalists, as well as for her ever-ready help and advice on all tennis matters.

Mrs. Fagge then presented the Cup, and 1st prize to the winner, and 2nd prize to the runner up, congratulating the Nursing Staff of the Hospital on its sporting capabilities. Both were suitably acknowledged and votes of thanks were proposed to Mrs. Fagge, the Hon. Mrs. Molyneux and Mrs. Mollison, the proceedings closing with tea, and a hearty vote of thanks to Matron for a very pleasant afternoon.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

A Nurse's Training.

DEAR SIR,—On reading the letter in the last number of the GAZETTE, *re* "A Nurse's Training," I experienced very mixed feelings, as a result of which I here venture a protest.

The "Pompous preamble" was amusing and I settled down to enjoy the article.

My enjoyment was short lived "no one can, save by accident, be more than partially trained."

I was overcome by horror. The thought, that my chances of making a success of my profession depended, not on my taking a three years' training at Guy's, but on an accident, was overwhelming.

I stopped to reason with myself.

I remembered the sisters, diverse characters, no two alike, yet all admirable, capable women so far as their work is concerned. Though I do not love them all I admire and respect them as successfully trained women.

Accidents!!!

I thought accidents were rare occurrences, surely the same accident could not have happened to so many women.

Some few years ago I was working in a clinic and the Head of our department was a woman of strong character and capabilities. All subordinates admired and respected her. "Isn't she wonderful," I once remarked to a friend. "It is her hospital training." she replied, and I discovered later she was trained at Guy's. Though she told me much that was interesting, *re* the training, she never mentioned the word accident, unless it were in connection with Astley Cooper Ward. Traditions I heard there were many and her reverence and admiration for them set me tingling to feel for myself.

To continue: The discription of the "Lambs" is amusing, but the School is a happy place. Few, if any of the Guy's nurses will deny that they enjoyed every moment of it. My "set," I am sure, are no exception to the general rule and we were very happy.

The exaggerated decorum and ethereal qualities described are the result of the seed of seriousness necessary and the admiration which must dawn (perhaps subconsciously) in each individual on being introduced to that corner of the world where everything is done in the ideal way. Without that little shrine of idealism, the training would be *too* hard.

With regard to the detail of a Junior's work, I was disgusted to find your correspondent was not aware of the intellectual value of sweeping floors! "Cleanliness is next to Godliness," but surgical cleanliness is even a shade nearer.

The men in their training have much more practical experience of asepsis than the nurses. They see the germ and its cultivation, and are consequently easily impressed with its importance. A nurse merely handles dressings and sees the result of sepsis on the patient.

The sweeping of a ward, as done by a "Junior Pro.," is not the work of a charwoman, but an (intellectual) lesson in thoroughness. Surely one would not wish a Junior to *practise* thoroughness on a patient?

A good maid in a private house would fill the soul of a competent Junior with horror were she to change places with her. There is no comparison with the work, it is not menial, but an object lesson. If

only someone, in these days of enlightenment, would come forward with as thorough, but less objectionable type of practise work, I am sure the world wide nursing profession would be eternally grateful.

As regards a lack of surgical training, I might say that as Junior in a men's surgical ward I learnt more about surgery and dressings, etc., than I have ever done since.

I worked with a splendid Head Nurse and a wonderfully capable Sister (I do hope they were not accidents).

As Junior I was called upon for this, that, and the other, with what joy I left my menial task and dashed behind the screens to be initiated into the wonders of dressing a surgical wound, and the glory of actually knowing how to bandage.

I don't believe I ever swept the ward to satisfy my dragon of a Sister, and though this was a source of great worry to me it did not fill my day, nor yet supply food for nocturnal weepings.

The evenings of operation days were the wonders of my existence.

The giving of hypodermics, subcutaneous salines, and many other forms of treatment was I taught in those irresponsible days. When the sight of the broom made me perspire I remembered that Sister, the woman I admired most in all the world, at the time, not so very very long ago had been in my place; not that I wanted to be in hers, but I envied her acmé of training.

Night duty, in a medical ward at all events, does not consist of keeping the head nurse and incidentally the patients awake by making happy care-free noises in the kitchen and I can hardly believe it is like that in the surgical wards. A take-in week would seem to me to supply enough interesting work for two people to keep them going all night.

In a medical ward the Junior has the best of it. To her falls the lot of "specialising" all bad cases; measuring all drugs and preparing for treatment. Surely she does not envy the Head Nurse her few minutes conversation with the H.P., which little duty is of doubtful agreeableness.

As for *chance* of varied training, that, I think, rests with the individual. The Powers that be are approachable, and surely one can ask. Is there a lack of enterprise amongst the nurses?

I should imagine that not so very long ago medical and surgical nursing did not hold two such distinct spheres for the nurses. The care and comfort of the patient constituted her duties, not a scientific knowledge of these subjects.

It is only of late years that science has entered into the curriculum of the nurses training and, during these recent years, I think the training has made great strides.

I might say that a year or more of strings for one ward is already practically a thing of the past, as is also the "sweep." In fact, evolution is keeping fairly good pace with advancement, and the article begins to sound to me like the man who says with an air of prophesy, we are going to have a storm, when the first large drops have pattered down.

I like the suggestion of vacuum cleaners they will still supply a lesson in thoroughness, but I venture to think most of the other suggestions have been in the minds of the powers that be for some time past.

The subject of a satisfactory curriculum is not so easy. I gather from the article on page 426 of the same number of the GAZETTE that even the men's curriculum is not all it might be. Perhaps even the Nursing profession is ahead of the Medical in this particular branch of work.

Another little point that comes to me is, that when I was Senior and in a position to help the Dressers, I found them very anxious to learn much. In fact Junior Dressers seemed to know *very* little practically, though theoretically they were near perfection.

I was relieved to find that your correspondent had purposely drawn "an extreme and one-sided picture."

The other side appeals to me. I am convinced that the "minor inaccuracies of detail" constitute the greater part of the article and a glimpse of the real thing in its present progressive stage would convince him (or her) that Guy's Nurses in their own sphere stand at least on a level with Guy's Men in the opinion of the world. If there is a doubt shall we ask the Borough?

"A GUYOSITE."

DEAR SIR,—"E. R.'s" letter in your last issue of the GAZETTE, ought not to pass without a protest.

As your paper circulates far beyond the gates of Guy's, may I be allowed to note a few facts, in order that our friends, yes, even "E. R." herself, may gain a juster appreciation of the training given to the nurses, and of the spirit in which "the powers that be" are striving to secure better opportunities for the staff in training, and a higher standard of efficiency in those who gain a Guy's Certificate.

The picture "E. R." draws of a nurse's training is a gross exaggeration of the truth and displays an amazing ignorance of the system in vogue at Guy's to-day, or the hope we have of the future.

It goes without saying that the "frightened lamb" entering the wards (who is not nervous on beginning a new life among strangers?) must go through some drudgery, the amount of which has been reduced considerably during the last few years. It is almost an impossibility for a nurse to pass her three years without ever returning to the type of ward—medical or surgical—in which she started.

No Head Nurse spends her time as "Strings" in a "Special" Ward, such as "Babies," "The Eye Wards," "Out-Patients," etc. Six months there followed by six months in a Surgical or Medical Ward is the usual system. Then may I remind "E. R." of the "all round" examination which every nurse must pass before she is given her Certificate.

May I also point out that teaching is always going on in the wards among the nurses. Treatment is rarely given, either by night or day, without as many nurses as can be spared being called to watch it, and explanations are invariably given.

On night duty Junior Probationers go from ward to ward to see any special treatments, and does "E. R." forget the many dressings that fall to their lot when there are no dressers about to do them?

I admit nurses still have too much purely domestic work, but probably less at Guy's than in many hospitals. At some future time we hope to see Guy's as a leader in a new régime of nursing when there will be no sweeping or brass-cleaning for Probationers. Guy's men and women have always been noted for loyalty to their hospital, I fear "E. R." is an exception.—Yours sincerely,

"A SISTER TO ASSIST 'E.R."

Guy's Hospital.
October 29th, 1923.

DEAR SIR,—Is it quite fair to make such a sweeping statement as, "A Guy's nurse is cast out on to a cold and unfeeling world half-trained"?

Can a Guy's nurse let that pass unchallenged?

No! First of all we should like to ask "E. R." if he has exhibited that loyalty so traditional to Guy's in his article on the System of Training of Nurses, in which he has endeavoured to show up non-existent weaknesses and flaws in one of the most famous training schools in the world? His powers of observation, coupled with second-hand knowledge, have not enabled him to gain the complete mastery of his subject, necessary in an article published in a GAZETTE which ultimately travels to nearly every corner of the universe. Since "E. R." has gained such a one-sided view of a nurse's training we will now endeavour to explain our peculiar, but efficient mode of nursing the sick and helpless.

First he appears to strongly object to nurses sweeping, dusting, etc., insomuch that he objects to the three great factors of a nurse's preliminary training, namely, observation, care of detail, absolute reliability, all so vital in the running of a well-organised ward.

On the contrary he would prefer the terrified pupil, on being thrust into a surgical ward to be straightway plunged into the intricacies of a colostomy dressing, or, perhaps, to take the surgeon in one of his important operations of life and death, and infuse the collapsed patient.

Apparently "E. R." has convinced himself (may he be alone in his heresy) that a ward-maid and her perverted ideas of sweeping and surgical cleanliness is the greatest asset to a ward of sick people! May he have his bed (when warded) banged vigorously by the lady in question in her strenuous efforts to sweep the ward, or the contents of his locker shaken mercilessly from their accustomed home to become part and parcel with the dust, and see his butter joining company with the despised broom. Certainly the amount of dust ingested by patients admitted in 1923, gives rise to the suspicion that their digestive organs are undergoing a great change in their immense adaptibility!

In answer to the fact that a nurse sometimes spends her first month in a surgical ward and the rest of her training in a medical aren't the exceptional cases being quoted? Nurses who spend a long time in medical wards invariably have surgical strings bestowed on them. Each day, may we add, brings some knowledge gained, and even bows under the chin do not deter the owner of them from learning more of her work and all it embraces.

In the training of a medical student, devised and balanced though it be, there is apparently no time to waste on the art of bandaging. When qualified men, are in their turn, "cast out on to a cold and unfeeling world" (certificated) will they remember with gratitude the sympathetic half-trained nurses who guided their erring steps into the straight and narrow path of bandaging?

We can only end by thanking "E. R." that through his unwarranted attack on our System of Training we have realised with gratitude, what a wonderful school of training we are at present enjoying the advantages of.—Yours sincerely,

"A GUY'S PRO."

DEAR SIR,—I was sorry to hear that my letter was interpreted as stating that Guy's nurses were thoroughly inefficient. Nothing could have been further from my intentions. My statement is simply that the present system imposes handicaps which it has no right to impose; handicaps which are to be appreciated properly only by those who have acquired a proper perspective by retiring to a convenient distance. The fact that Guy's nurses rise superior to their imposed limitations will not induce me to place a wreath on the grave of the "system," which imposes the limitations, although, perhaps, if I were privileged to attend its obsequies, I should be delighted to bestow "immortelles" and wax *flowers with the utmost liberality*. Guy's nurses are already the best in London. It should be easy to make that "best" absolute and not relative.

My criticism should offend nobody, since no one person is responsible for the "system." It should have no ardent champions, since no one can claim, and no one would wish to claim, the parentage of this feeble-minded cretin. To paraphrase the words of Topsy "'Spec's it growed."

In the last few months tentative efforts at reform have been made, but they have not been of a very material nature. The "system" is too unwieldly and too archaic for it to be improved adequately by conservatic treatment. The knife's the thing.—Yours sincerely,

E. J. R.

Rugby Football.

GUY'S v. HARLEQUINS.

This match took place on the International ground at Twickenham, on October 27th, in a high wind, against which Guy's played the first half, and on a turf remarkably good after the recent very heavy rains.

The first half ended with no score to either side, but all through the Guy's forwards had served the ball remarkably well, heeling consistently. Meissner had got the ball away neatly, but his passes were too slow, and though endlessly the ball came to our backs, yet was nothing done with it beyond a passing across the field to be finally smothered by the defence, or to finish with a kick into touch. Remember the Harlequins had a fast defence—B. L. Jacot, G. R. Roujier, A. L. Gracie and R. Gibbs, and almost always were they able to forestall any attempt at attack. There was little straight running on our part, too much of the passing was simply across the field, and no appreciable gain secured; and again, if one will not be thought too critical, isn't there too much kicking. One saw the three on their toes or going straight up field for an aggresive

movement, when the ball was banged into touch and often from behind them, the out-half having dropped back to get his kick in. Magnificent was some of Van Schalkwijk's kicking, but sometimes one wonders if modern football doesn't provide too much "Touch Line" play and too little "Goal Line."

The Harlequins were as powerless behind the scrum as ourselves; they didn't have so many opportunities. We lost a fine chance midway through the first half. Steyn got away neatly and facing Wainwright put the ball to touch, he didn't notice Van Schalkwijk on his right. The Captain had positioned himself perfectly. It is so easy to see these things from the touch line. A. L. Gracie, the Scots Captain, had done some good kicking in the centre, but honestly, he was handicapped by his fellow centre who one believes really is a forward, and a jolly good forward too.

Meissner lobbed his passes and thus the ball could easily be kept pace with, as our threes handled, by the fast defence of the Harlequins. Don't find too much fault with the passing on either side; the wind was very high, the ball very light. Our forwards had taken much out of themselves against the wind, now the 'Quins livened up. Spence went down gallantly to the rushes; Meissner another; Graham-Davies aided well in defence, but their defence could not keep out Gibbs who scored after some good inter-passing between Worton and and Davies. Van Schalkwijk replied with a beautiful try for us. He got the ball, hesitated as though to kick, and looking for the kick, we saw Van Schalkwijk go straight through the opposition to score by the posts. Steyn missed the goal. Very sad, but tension was great and Steyn had our sympathy. He (Steyn) collared Jacot thoroughly just after to save a certain try. Then Neser marked amidst a crowd of opponents and saved us again. The Final Whistle, 1 try all (3 points to 3).

Guy's Team.—W. J. Badenhorst, G. R. Mostert, H. Graham-Davies, J. D. B. Spence, C. L. Steyn, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, B. G. Scholefield, F. Bekker, G. G. T. Tregarthen, De Wet Vorster, F. W. Schabort, G. G. Cameron.

The heeling of the forwards was jolly good. The tackling jolly bad. The wings hadn't any chances; it was noticeable the halves and centres didn't slip a man before passing. It can't always be done, they did their best and Guy's are proud of J. G. Van Schalkwijk and his team.

GUY'S v. OLD BLUES.

Those who read accounts in the Daily Papers of our matches will note from their daily favourite, that on November 3rd, at Honor Oak Park, Guy's for about 20 minutes played like a team inspired, after which they never looked like scoring and apparently they were reduced to packing their line for defence; no one appears to have noticed that after the period of inspiration Steyn twisted a leg and after that found it difficult to stand on the slippery turf. This affected the threequarter line and the whole of the attack. Steyn remained on the field, one expects, at his Captain's request.

One does not say the above to belittle the Old Blues. They played well and thoroughly, and instead of being downhearted at our rapid scoring they manfully pulled themselves together and made us go all out to keep our line intact.

After 10 minutes play a fumble by the visiting full back looked like disaster, but they managed to touch down. Then beautiful passing sent Mostert in, to be followed just after by rapid following up on Steyn's part, and he secured a second try. Magnificent play in which Finnemore, Cameron and Van Schalkwijk figured was the next excitement—a delightful cross-kick by the last named, who sized up the situation cleverly, and Vorster crossed the line, Van Schalkwijk hitting the post with his kick. Spence next kicked a goal from a mark and Van Schalkwijk dropped a pretty goal. Ten minutes of even play and half time came.

From now to the end we were mostly on the defensive, but our men could not prevent C. D. Wales dropping a good goal. It was a good game and both teams did well. Spence was very fine and Meissner also got the ball away much better. Our forwards improve each match and our attack was much more a real scoring factor.

Result.—Guy's 1 dropped goal, 1 from a mark, 3 tries (16 points); Old Blues, 1 dropped goal (4 points).

Guy's Team.—W. Badenhorst, J. W. Finnemore, J. G. Van Schalkwijk, C. L. Steyn, G. R. Mostert, W. Meissner, J. G. P. Spence, E. E. Neser, N. M. Holloway, B. G. Scholefield, G. G. T. Tregarthen, F. Bekker, J. W. Schabort, G. G. Cameron, W. De Wet Vorster.

SPECIALITIES.

THE SAXONE SHOE CO., LTD., Kilmarnock.

We have before us a Saxone Prescription Boot, which is specially made to relieve foot weariness and disorders arising from fallen arches.

Loose appliances are often unsatisfactory, and this boot renders them unnecessary, for a strong steel arch is embedded inside and carried round the heel. This ensures ample support, a comfortable fit and ease in walking.

In appearance it resembles a normal boot, and the price is moderate.

Birth.

FERNANDEZ.—On October 26th, at a Nursing Home, to Christine (née Mayo), wife of T. Fernandez, M.R.C.S., L.R.C.P., M.A. Cantab., of 79, Sutton Court Road, Chiswick, W.4., the gift of a son.

Deaths.

CALDECOTT.—On the 14th October, at Reigate, Charles Caldecott, M.B., B.S.Lond., the beloved husband of Sophia Caldecott, late Medical Superintendent, Royal Earlswood Institution, Redhill, Surrey, age 62.

COLEMAN.—On October 20th at Withnell Hall, near Chorley, Lancs., Rhoda May, the wife of J. Jordan Coleman, M.B. Lond., late of Wellington House, Bridlington.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

ON Tuesday, October 30th, the War Memorial Committee met for the last time and dissolved on the completion of its work. Details of subscriptions have been published previously, and in this issue we print the final balance sheet, showing a balance of £25 to the good. This sum has been devoted to the War Memorial Scholarships Trust Fund, as will be any further money received, such as that due from outstanding instalments. The Governors of the Hospital have accepted the Memorial Arch in trust, and will maintain it in perpetuity as a Memorial to those Guy's men who laid down their lives in the Great War.

It has also been decided to place in the College Dining Hall a Memorial Tablet inscribed with the names of the fallen. This matter is now in the hands of the College Committee, and we hope to publish details of the Tablet in a future issue.

It is a matter of the greatest credit to the Hospital that the War Memorial Fund has been brought to such a successful conclusion. The work of organising the Fund has been no easy one, and the sincerest thanks of all are due to Mr. H. Cosmo Bonsor, the Chairman of the Committee, who has throughout rendered invaluable help and advice, and to Prof. Pembrey, the Hon. Secretary, who has devoted himself so greatly to the task of bringing the Fund to such a successful conclusion.

WE have received, recently, an account of a meeting of the Faculty of Medicine of the Republic of Costa Rica, at which Dr. J. M. Barrionuevo, an old Guy's man, was elected Vice-President of the Board of the Faculty. We offer to him our sincerest congratulations at the honour which has been conferred upon him, and are proud to think of Guy's being thus represented in countries that are not part of the British Empire.

ON Tuesday, November 13th, the Annual Dinner of the Guy's Hospital Employees' Association was held at the Bridge House Hotel, with the President, Mr. H. L. Eason, in the Chair. We can recollect few Hospital functions that have been as pleasant, and we heartily congratulate the Employees' Association on the organisation of such a successful ceremony. The large dining-room at the Bridge House was almost overflowing, so large was the attendance, and amongst the guests were many of the Hospital Staff. The occasion itself served almost as a startling revelation.

Many of us have been wont to think that the very existence of a large hospital depends on the patients, on the medical staff, or on the nurses. But after attending such a gathering as this, one began to realise that behind the scenes, unnoticed and quite out of the limelight, there exists a large army of workers on each and all of whom the real work of the Hospital, in all its multifarious departments, depends. Where, we were asked, would we all be but for Mr. Saltmarsh, or the wonderful and often mysterious activities of Mr. Burgess, and many others of their companions.

From the Chairman we received many new and wonderful accounts such as might be used, as he said, in the making of a film to depict the running of a hospital. The unbounding patience of Warren in his efforts to grow grass in the Park, the unceasing activities of the Dispensary boy in his efforts to monopolise all the lifts of the Hospital, the model and silent procession of wardmaids from the kitchen to the wards—these and many other activities were presented to us in a new light.

Space will not permit us to detail the many other secrets that were divulged. In addition to the speeches, a remarkably good programme of music was provided, the wit of Mr. Rex Harold being in great demand. We cannot do better than repeat that the dinner was a great success and a credit to the Employees' Association.

In a previous issue of the Gazette we gave an outline of the plan for the institution of a series of Lectures as a memorial to the late Dr. A. H. Fison. Up to date, a sum of £466 has been received as a result of the appeal for subscriptions to establish these Fison Memorial Lectures. The minimum sum required if the lectures are to be instituted is £500. There must be many who wish the Fund well and have hitherto overlooked its claims. We trust that further donations will be forthcoming in response to this notice, and that an early opportunity will thus be afforded to set the Memorial in being. All subscriptions should be forwarded to Professor T. B. Johnston, at the Medical School Office.

We are pleased to reprint from the *Brecon County Times* the following account of a presentation to Dr. T. P. Thomas, who qualified at Guy's in 1900 :—

"In gratitude for his valuable services as hon. secretary to the County Panel Committee and to commemorate his occupancy of the office of High Sheriff, the medical practitioners of Breconshire entertained Dr. T. P. Thomas to dinner at the Castle Hotel, Brecon, on Friday, October 26th, and made him a presentation.

Dr. A. E. Jones (Crickhowell) presided, and the Sheriff's chaplain (Canon Roberts, vicar of Brecon) and Mr. T. J. Parry (Clerk of the Breconshire Health Insurance Committee) were specially invited guests.

The Chairman proposed the health of Dr. Thomas, and the toast was received with great enthusiasm. Other toasts included "The Guests," proposed by Dr. W. R. Jones (Brecon) and responded to by the Vicar of Brecon; "The Medical Profession," proposed by Mr. T. J. Parry, and responded to by Dr. Black Jones (Builth Wells). The chairman's health was also heartily drunk.

During the evening Dr. Thomas was presented with a handsome silver coffee tray bearing the following inscription :—'This coffee tray is presented to Dr. T. P. Thomas by his brother medicoes of Breconshire as a token of affection and appreciation for all he has

done for them as honorary secretary of the Panel Committee, and to commemorate his year of shrievalty, October 26th, 1923.'"

As will be seen from a letter, which we print elsewhere in this issue, an attempt is being made to revive our worthy, though somewhat shy, contemporary, the "Guyoscope." In days gone by the regular appearance of this source of humour was an accomplished fact. During the war, in common with much else, it lapsed into obscurity, and though one or two attempts have been made to revive it, the enterprise, though temporarily successful, seemed ever doomed to failure. We trust that this will not be so in the present instance, and that we may even greet our witty contemporary so often as once a month.

There are, no doubt, many at present in Hospital who have never seen a copy of the "Guyoscope" and know not of its function. We cannot do better than to say that its object is to portray the humorous side of Hospital life. Throughout the Medical School and the Hospital, in the laboratories, the surgery, the out-patient departments, and in the wards, there are incidents without number which at times give rise to uproarious laughter. In the past these have been forgotten only too soon, but let them henceforth be duly noted and addressed to the worthy and mysterious Mr. X. who has now appeared once more to lighten the wintry monotony of Hospital life.

THE response to our appeal for suggestions as to improvements in the GAZETTE has not been very great. A decision as to this has now, however, been made by the GAZETTE Committee, and we hope to give, in our next issue, an outline of the improvements which will definitely come into being with the next volume.

January, 1925, will mark the Bi-centenary of the opening of the Hospital. In the near future a start will be made in the collecting of material for a Bi-centenary number of the GAZETTE. A special Committee consisting of Members of the Staff, and others, has already been appointed in this connection. We trust that any Guy's men who are possessors of any items of interest relating to the history of Guy's will forward them to us. Such items, however small, will be of the greatest value and assistance in the compilation of an issue which shall be worthy of such an auspicious occasion.

At the last Court of Committees of the Hospital the Governors referred to the House-Committee the consideration of the personnel of a Special Committee to institute an Appeal with a view to relieving the Hospital of its Building Debt, and to make any arrangements for the celebration of the Bi-centenary of the Hospital.

Nursing News.

We are glad to announce the success of our Nursing Staff at the Annual Exhibition of Food and Cookery, held at the Royal Horticultural Hall, Westminster, during the last week of October.

In the Invalid Cookery Section there were no less than 60 invalid trays exhibited by nurses from most of the larger general hospitals in London and neighbourhood. The six of our staff who entered were—Sister Jameson, and Nurses Bishop, Boyt, Bugbird, Gibbs, and G. M. Reed. They were successful, as a team, in gaining the Hospital Challenge Shield, and we also congratulate Sister Jameson and Nurse Boyt on winning Silver Medals, and Nurses Bishop and Gibbs on winning Bronze Medals.

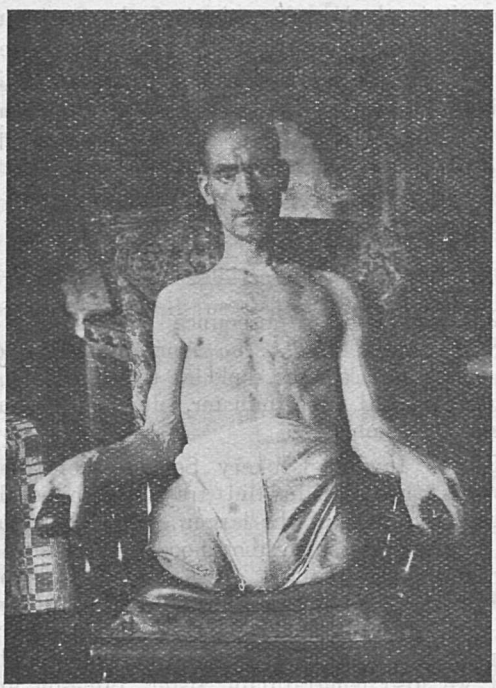
The trays, which were uniformly set out with simple white china and tastefully decorated with flowers, showed a good variety of invalid dishes, and Nurse Gibbs was most original in presenting a Diabetic Tray which was well thought out and proved quite a novelty.

We are very glad to find such enterprise and enthusiasm in this very important branch of a nurse's training, and we hope that the nurses of future years will emulate both their keenness and their success.

Double Disarticulation through the Hip Joint.

A case of double disarticulation through the hip joint is, I think, worth communicating to the Guy's Hospital GAZETTE, and I shall be glad if you can find room for a short account of it in your columns.

The patient, a male, aged 34 years, was serving in Mesopotamia when he first noticed a swelling in the middle of his left thigh. He was sent to hospital and had treatment, and was eventually sent home, discharged, I think in 1919. He came under the care of Dr. G. Ferguson, who sent him up to the Hospital.



On admission to the Oldham Royal Infirmary in November, 1921, he was suffering great pain in the left limb, which was fractured at the middle third of the thigh, where there was a very large mass reaching from the middle of the thigh to the knee, which proved to be a myeloma.

The limb was removed at the hip joint by Furneaux Jordan's method, Lynn Thomas tourniquet forceps being employed to control the vessels. He lost very little blood, and made a wonderful recovery with practically no shock. The wound healed by first intention, and he was discharged feeling very well, and looking much stouter than when he came to hospital.

About twelve months later, January, 1923, he was re-admitted suffering from acute pain in the right hip and inability to move the limb at all. A radiogram showed thickening and shortening of the neck of the thigh bone, but no displacement was seen. He was in such distress that he begged for the limb to be removed, a step I hesitated to take on account of the fearful mutilation involved and the small chance of really curing him. However, his condition was so pitiable that I consented, and the limb was removed by the same method as was employed in the first instance. The growth occupied the neck of the femur, but did not involve the acetabulum. The muscles were cut off as short as possible, and the ligaments around the acetabulum removed. He again rallied wonderfully well, and on the second day began to eat and sleep well, and improve in his general condition. This time there was some slight suppuration in the track of the drainage tube, but the wound eventually healed soundly. I was very pleased with this

happy result, for the patient was bright and free from pain, and took a very cheerful view of life in spite of the dreadful disability.

Then to our dismay a small recurrent growth appeared on the skull, which is now in the condition shown in the photograph. He was allowed to go home, but his condition was very miserable owing to the pain in his head and the marked wasting. He is now almost at the end.

I have thought it worth while to send these rough notes to the Guy's Hospital GAZETTE, as such a mutilation must be rare and also because the patient made such a remarkably rapid recovery from the operation on both occasions, almost "without turning a hair"; he was not ill for more than 48 hours in each case.

I read in Bennie's Surgery that "the results of disarticulation at the hip for sarcoma are lamentable." I had hoped to furnish him with a successful case in this instance, but his statement still stands true—the end result is lamentable.

A. H. GODSON.

63, Union Street, W.
Oldham.

Obituary.

J. G. SANER.

It is due to his memory that a word of appreciation should be said of J. G. Saner. John Addington Symonds, in his autobiography, relates how the appearance of some men appealed to him, and certainly that of Saner appealed to many of us. Those of us who knew him at Guy's will not readily forget his smile. He had a most beautiful face and expression, but there was nothing effeminate about either On the contrary, any one who knew him at all well, would say that there was something very manly about him. With his good looks there was something that told of great honesty. He was a man upon whose word and work one could absolutely rely. Saner was full of brilliant ideas, and it is only now, when death has claimed him, that we know why he never reached the position, to which some of us thought, at one time, he was entitled to attain. The spirit was willing, but the flesh was weak. He told me of his trouble with a smile, and even then was making his plans, according to the new conditions which were set up by disease. The recollection of his smile heartened the writer, when he, too, spied in the distance the shadow of the "fell sergeant."

He left us before the war, and returned to South Africa. We all felt that we should never see him again, but some of us loved to think of him in that wide country, where there was room for his ideas to expand.

He settled down in Johannesburg, where he did well. The sons of South Africa who come to us will remember that so long as we can return men of the finished type of Saner, the credit balance is not all on their side. One could never say anything disagreeable to him. Somehow or other it fizzled out as rather a poor joke by the time it had reached him. To his widow our sympathy must be forthcoming. To his two children we may be permitted to say that, being his children, they will desire to emulate the example set by their father.

To know Saner was to love him. To know Saner was to be, at any rate in his presence, a better man. He was good at play, better at work, best at showing those of us, who knew him, how to go straight. I have no photograph of Saner, and I had not seen him for ten years before he died, but I remember well the exact place in the Park where we last spoke to each other. It is hallowed ground to me now, and I want to think of him as I knew him then. I want to think of his looking forward to attaining health and success in Africa. The success was his, but "with the throttling hands of death at strife" he must have fought hard for its attainment.

Change of Address.

Stanley Wickenden, M.R.C.S., The Beeches, St. Leonards Bank, Perth.

G. H. S. Daniell, Erthig Park, Wrexham.

Papers by Guy's Men.

J. B. Parfitt, M.R.C.S., L.R.C.P., L.D.S. Cavity Preparation.—*Brit. Dent. Journ.*, xliv., 1923, p. 1272.

T. G. D. Bonar, M.B., B.S. Four Cases of Mastoid Disease.—*Lancet*, ii., 1922, p. 1079.

Witchcraft.

I was drawn into the study of this unsavory subject by an article, "A Witch's Bones," by W. H. F., published in the GAZETTE in 1921, and have collected subsequently a mass of material bearing on the subject of witchcraft. This is not the place to go into the subject *in extenso*; indeed, my researches would fill more space than the editor would be inclined to grant me. I should like, however, to cover the ground with an outline, which may possibly remove misconceptions and interest those who are working on exoteric science, and have no time or opportunity of getting behind things.

I started, like most of us, with the impression that the witch was a poor old woman, possibly an eccentric, who kept a black cat, and a tame toad, and did a bit of fortune telling; that in an ignorant age she became the innocent victim of persecution and ended by being burnt or buried alive. That this was the case in many instances I have little doubt, for witch prosecutions passed all bounds both here and on the Continent. Little children and even animals were condemned to the flames. At Mohra, in Sweden, fifteen children were burned in 1669; in France a cock was solemnly tried by the Inquisition, found guilty and burned; dogs and other animals suffered a like fate. The last official execution was in Scotland at Dornoch in 1772; the last in England was a lynching near Maldon, Essex, in the early nineteenth century.

Further study into the question of witchcraft undoubtedly proves its reality, from the evidences of the witch trials taken under the ordinary Criminal Law in this country and on the Continent as well as in the New England States. From this evidence we can draw the following conclusions:—(1) Witchcraft was an actual devil worship. At the initiation ceremony the candidate renounced her baptismal vows, vowed to do all the harm she could, to work for evil, and swore allegiance to Satan. The ceremony was an elaborate one and ended by the marking of the candidate by the presiding officer, a man who personated the devil, by puncture, usually in the shoulder, and by the withdrawal of blood by the mouth. This was spurted into his hand and a mark made on the candidate's forehead.

(2) The covens of witches met on what was known as "the sabbath," thirteen in number, presided over by the chief, who often was dressed as the devil with horns and hoofs. A sexual orgie took place at these Sabbaths, and the dance was invariably in a ring with linked hands and faces outwards. Sometimes the dancers danced naked; sometimes not. Their bodies were inuncted with certain ointments, the prescriptions of some of which I have obtained. Belladonna, aconite, and hellebore were the common drugs employed, and these were incorporated with the fat of an unbaptised infant, which was disinterred at midnight under disgusting rites. Others than witches attended the sabbaths by invitation, and children were taken by their parents or enticed away by the witches. It is interesting to note that children below the age of puberty were kept apart from the revels, but partook of the banquet that followed, so that one may say "honour even among witches"!

There is evidence that the witches understood telepathy and hypnotism, and undoubtedly had a considerable knowledge of the preparation of poisons, sedatives and aphrodisiacs. Some writers are of opinion that their poisons and simples got incorporated into the medical pharmacopœias. That they were consulted for purposes of abortion is undoubted.

In the witch trials, evidence on sworn testimony is given as to bodily translation from place to place, and the "broomstick" rests on historical records. Sometimes the witch flew on a broomstick, sometimes by giving an incantation while shuffling the feet on straw. To prove an alibi, husbands attested that their wives were asleep in bed, when the contrary evidence proved them to have been at the sabbath. Imps or demons were attached to the person of the witch in the shape of a cat, dog, toad, or other animal. The mass of evidence I have examined appears to have been given *bona fides* on all these points. Learned jurists in the seventeenth century in England conducted many of these trials, and Lord Justice Sir Matthew Hale, condemned two women to the stake at St. Edmondsbury, after a lengthy trial, the deposition of which I have before me. Sir Thomas Brown, author of "Religio Medici," gave evidence at this trial against the prisoners and discoursed on the actuality of witchcraft. Of this actuality I have perfectly satisfied myself, as would anyone who would take the pains that I have done to

examine the evidence and study the literature. One strange fact comes out: the witchcraft phenomena were not only the same from Italy and Greece to the north of Scotland and Scandinavia, but were the same in the seventeenth and eighteenth centuries, as when Apuleius wrote his "Golden Ass."

There are some authorities who looked upon this cult as the survival of an ancient religion, the cult of Set of the Egyptians and of Satan in Christian times, modified as regards the evil deity by the prevailing religion. I cannot find any indication of such, however, existing with Druidism, a solar cult religion, of which we have more knowledge than the history books would lead one to believe.

I would, in conclusion, offer some explanations for the phenomena of witch cult:—(1) That the subjective sensations of translation, flying, existence in strange and distant places, were due to drug intoxicants (belladonna, aconite, etc.). The evidence shows that these phenomena were all of a kind through the centuries and in all parts of the world. Now we know in the alcoholic poisoning known as *delirium tremens* that the subject experiences certain halucinations and sensations common to all in this condition; so I think it highly probable that similar halucinations, but of a different character, might be induced by the inunction of the witch ointment. (2) A metaphysical explanation, which will be understood by Catholics and Freemasons; I will indicate easily to these what I mean, though explanation to outsiders may be somewhat difficult. Perhaps I may best put it in this way. By psychical concentration on a good and sacred plane it is possible to reach a peculiar degree of spiritual condition, amounting in some to a happiness of exaltation, in the less advanced to a feeling of a mystical something. The illiterate peasant equally with the cultured catholic, is aware of this at the celebration of the mass. The good honest fellow, equally with the philosopher, is aware of this something in his Freemason's Lodge, albeit the former really specialises on the "fourth degree," while the latter is attracted by the esoteric side of Freemasonry. A critical point possibly is expressed in the closing of the second degree by the discovery of A S—d S—l.*

*This is fully and openly dealt with by a distinguished Freemason, W. L. Wilmshurst, P.M., in a chapter on the H.R.A. in his book "The Meaning of Masonry" (William Ryder & Sons, Ltd.).

For want of a better word, and without offence, let us call this "magic"; magic in the good and clean sense, connected with right and proper human conduct.

Now, if this be admitted, we can see the reverse side of the shield—the Black Magic. The phychical condition here wrought is by obscenities, blasphemies, and atrocious rites (plus belladonna and aconite). The sabbath celebrations, secret, and with an elaborate, disgusting ritual, have their working on the human mind, so that if we symbolise Freemasonry as the upright triangle, witchcraft is that triangle reversed, or to accept the ancient Egyptian symbolism, the first triangle represents Ra, the reversed triangle Set, the God of Evil.

My remarks of the subject of witchcraft have purposely been elementary, as otherwise I should require a whole volume, and I have avoided reference to authorities. Those interested and wanting a thrilling fiction, accurate in detail, should read "The Devil's Mistress," by Brodie Innes. "The Witch Cult in Western Europe," by Margaret A. Murray, is a recent publication and altogether admirable, with the exception that it presupposes the reader to have acquaintance with four or five languages. Ennemoser's "History of Magic," a bulky translation from the German is illuminating in parts. Elias Levi's "History of Magic" deals with that side of the question. Mackay's "Popular Delusions" is easily written and covers the historical ground. The Society for Psychical Research possesses a most complete library on the subject.

A. P. A.

The Doctor's Sermon.

I had gone to see our old vicar who was gradually but slowly falling a prey to his advancing years. His four sons had all been educated for the church, and there had been that day a presentation of a silver tea service to one of the older ones, who was just leaving the church where he had been curate for some years.

When I came down from the old man's bedroom, I found the sons and daughter assembled in the drawing-room, examining the silver gifts which their brother had brought over to shew them. They were all very merry and

in high spirits, more especially the one who was the hero of the day. I had known him for a great many years, in fact, almost since his infancy. He was the owner of a dry kind of humour, at times rather sarcastic, which he loved to exploit on the more intimate of his friends.

After admiring the beautiful items of the service, I asked for paper on which to write a prescription. I was looking at the teapot when its new owner came up to me with a sheet of paper. "Now, Doctor," said he, as he gave it to me, "write us a sermon." The short prescription was soon done, and when he had taken it I stood up, and holding up the teapot in my left hand, said, as I pointed to its features, one by one, "Now, I will preach the sermon. First, you will observe that not only is this a generous present, but it is, in itself, a very appropriate gift to a young clergyman. In fact, it is a type of all that he ought to be; and there can be little doubt but that in choosing this, they did so with the object that you should not only see, but emulate, its qualities. They are such as these.

"You will notice that its virtues are not self-contained. It does not live a life for itself, its use is to distribute, amongst others, the good things that it holds. It lives to receive that it may give, and let others partake, if necessary, of all that it holds, even to its last drop. If there is a call for it, the whole of what it has must be freely given up.

"Then, as regards its own personality. It must not be allowed to get dull, or be dimmed by the woe of others. It must be bright and shining, and, when necessary, polished. The most promising feature we see is the spout. It is no good if it is not what is called 'a good pourer'; a dribbling, hesitating trickle is no good, nor a misguided stream falling on wrong places, instead of keeping straight to the point. The flow should be ample and sufficient, and when the cup is full, the flow must cease.

"Then there is the lid, a most useful part, and one which ought to be specially noted, for it implies a constant readiness to take in that which is necessary for its duties, and it enforces the axiom mentioned before, viz., that when duty is fulfilled, it is time to shut up.

"At the back you will see the handle, but it is not of the pure metal. It is dark. So, at the back of his mind, the parson keeps hold of the notion that a handle to his name and reputation would add to his usefulness. How much more good might he do as a Bishop!

"Hold up the pot; look underneath. Examine the part that is not in the public eye. What do you see? These are the marks which show whether the metal is pure or base. Is it what it pretends to be? Is it genuine? This one is. It bears the stamp of its maker, the hall-mark of purity.

"You remember what I said about the handle. The marks do not apply to that. That has a different origin. It is wood, and springs from the earth. There is a certain amount of use in it. There must be bishops, deans, canons, etc., but the rank does not carry with it the warranty of its purity and genuineness.

"So, sir, may your life be. A shining light to those around you, as well as a distributor of cheer to the weary, and a source of refreshment and rest to those who thirst and faint under life's hardships and burden."

My audience entered fully into the spirit of the parable, none of them more so than the recipient of the service, the tears rolling down his cheeks as he took the silver text from my hands.

R. C. C.

National Union of Students.

WINTER SPORT.

Is there a Faculty of Ski-ing in your University? If so, you had better avail yourself of this unique opportunity of becoming proficient in the Art and Science of Ski-ing, Skating, Tobogganning, and Ice Hockey. You can go either to Czechoslovakia or Norway (under the auspices of their respective National Student Unions) for about one-quarter what it would cost you in Switzerland.

A. *Czechoslovakia.*

The party would leave London on Tuesday, January 1st, 1924, either from Liverpool Street at 8.30 p.m., or Victoria at 8.30 a.m., travelling across Germany to Prague, where you would arrive at the Wilson Station at 4.5 p.m. There the party would be met, taken to hotels where accommodation will have been reserved,

and the following day be shown something of the most interesting sights of Prague; they would have lunch at the Students' Union. In the afternoon the party will leave for Benecke in the Krkonose Mountains.

From the 9th to the 12th there will be Winter Sports of every kind. Whether you are a novice or an expert you will find just what you want. There will be ski-ing, skating, toboganning and ice hockey. One item will be a three-day ski excursion to the highest mountains in Bohemia, viz., the Snezka, 1,605 metres.

There is no need to be a linguist, for experienced guides will be provided. Tobogans will be there and also everything for ice hockey. Bring your own skates and skis, if you have them. If not, mention that you will want to hire them when you apply, and they will be there waiting for you. Please also state which particular sport you want to take part in. The party would be best split into two—(a) for ice hockey and skating, and (b) for ski-ing and toboganning. But this will depend on the applicants themselves.

The numbers are limited to 25, so if you want to go, let us know at once. You will be back in London by the 14th of January, but probably if you wanted to stay longer it could be arranged.

The cost of the stay will be £6; the journey costs about £4 single, so that £14 will cover it all.

B. *Norway.*

The Trondhjeim students have invited 20 English students to be their guests for a week at their cottage in the snows.

The party would leave Newcastle about the 27th of December, and the voyage would be the only expense.

There will be a Ball in Trondhjeim, probably in the College, and plenty of good skiing, ending up with a long torchlight toboggan run.

As you know, Norway is the real home and first father of ski-ing, and life at this hut up in the mountains will be the real thing.

All communications should be addressed to the Tour Secretary, National Union of Students, The University Union, Malet St., W.C.1.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

P.R.D.

DEAR MR. EDITOR,—May I through you make an appeal to the Clerk's in the Out-Patients' Departments to see that some answer is written on cards brought from the Front Surgery! It is disheartening to find that the majority of such cards as do return, have no note of the official diagnosis. Some firms do endeavour to return all cards marked P.R.D., but there are offenders, notably in Surgical Out-Patients. The Assistant Surgeon's Dresser often has a very busy time at Out-Patients, but I am sure he could manage just this little more.—I am, Sir, Yours faithfully,

H.

12th November, 1923.

The London Medical Student.

DEAR SIR,—Has not "R. C. B." stumbled on an old book of some value, written by the man who, in his day, was one of the chief entertainers of London, and who was a medical student of the worst (?) type, and whose fun would neither be appreciated nor tolerated now-a-days, but whose descriptions were accurate so far as they went, "Albert Smith."

PILOCEREUS SENILIS.

The Students' Club Library.

DEAR SIR,—It has been brought to the notice of the Students' Club Committee that very few members know of the existence of the Students' Club Library, and of those who know of its existence very few indeed know what books can be obtained or how they may be obtained.

Since it is the Committee's desire that every member should have all the advantages due to him on becoming a member of the Clubs' Union, I have been instructed to request you to publish a report on the Students' Club Library, which is herewith.—Yours faithfully,

S. P. MEACOCK,
Asst. Hon. Sec. Students' Club.

The Students' Club Library contains approximately 1,250 volumes, which are arranged in 10 book-cases. There are 3 periodical racks and 2 paper stands with wire netting pockets fixed for additional daily papers.

There is a card index catalogue, to which every member has open access. Each book is catalogued under the Author's name, and where possible under the name of the subject.

The following Directories and Year Books of reference are being purchased in their latest editions:

—The P.O. Directory, Pears' Cyclopædia, Who's Who, A.B.C. and Whittaker's Almanac. The A.B.C. arrives regularly every month and is kept in the College Lodge.

The Times, which is filed daily, is kept for at least one month, and is available for reference.

The following weekly periodicals are taken regularly:—Bystander, Punch, Tatler, Sphere, Spectator, Sporting and Dramatic, The Field, London Opinion, Hospital, British Medical Journal and Lancet. All of these, with the exception of the British Medical Journal and Lancet, are kept in the Library for one month and then distributed to the patients in the Wards by Sisters Cornelius and Esther.

The following quarterly journals are stored in the Reading Room:—English Review, National Review, Blackwood's Magazine, XIXth Century, and Fortnightly.

Since The Practitioner is constantly removed from the Library, the Committee have stopped the issue of this journal and wish to remind members that periodicals must *not* be removed from the Reading Room, as they intend to stop the issue of any journal that is not left in the Library. It is therefore hoped that all journals will be left for the use of other members of the Club. Pens will not in future be supplied.

Mudies Library:—

A Subscription is made by the Students' Club to the above Library, in order that members may have the opportunity of securing up-to-date fiction and modern works of a non-technical nature.

Hitherto the Club's subscription allowed the borrowing of six volumes, at any one time, of Mudie's Class "A" (*i.e.*, the latest and most recent publications). The Committee will take steps to increase the subscription to enable more books to be obtained from Mudie's, should enough members notify the Librarian of their desire to make use of this privilege. This reverses the Committee's former decision to stop the subscription to Mudie's.

The Librarian will attend in the Students' Club Library from 1.30 to 2 p.m. and 5 to 5.30 p.m. daily, except on Saturdays when he will be there from 1 to 1.30 p.m. He can also be interviewed any time in the Wills Library.

It is hoped to publish a catalogue of the books at present in the Library at an early date.

Rules concerning the Students' Club are published in the Clubs' Union Year Book, and intending borrowers should read these before obtaining books from the Library.

Revival of the "Guyoscope."

DEAR SIR,—Consequent upon innumerable requests, it has been provisionally decided to publish, as soon as possible, the first number of a new edition of the "Guyoscope."

The success of the idea, however, entirely depends upon the support given to it by those interested, whom I sincerely hope will make every effort to send in any contributions of prose or verse, suitable to uphold the traditions of this ancient journal.

Unless this help is forthcoming, the proposition will have to be abandoned. But I am quite convinced that if all the scribes, with which the Hospital abounds, will each make an endeavour, the "Guyoscope" will make a notable and welcome reappearance from the obscurity out of which it has, hitherto, only emerged at very rare intervals.

All communications should be addressed to the "Editor of the 'Guyoscope,' The College, Guy's Hospital."—Yours faithfully, X

The College,
Guy's Hospital, London, S.E.
November 19th, 1923.

A Nurse's Training.

DEAR MR. EDITOR,—"Et tu, Brute!" I was bitterly disappointed to see that a person of your discrimination and common sense, referred to my letter as an "attack" on the nurses, you too are apparently unable to discriminate between an attack and a defence. The attitude of the nurses is apparently to be summed up in the line "It was all very well to dissemble your love, but why did you kick us downstairs." For this attitude I suppose I am responsible. The sentence of mine which I fear affected the interpretation of the whole was the rhetorical question, "Why are Guy's nurses turned out into the world half-trained?" "Half-trained" is a word which conveys an unpleasant suggestion of incompetence to an "eye which smells a rat, sees it floating in the air and nips it in the bud." To anyone reading my letter with an open mind it must be at once obvious that "half-trained," in the context in question, refers entirely to the exclusively surgical or medical bias which the Guy's nurses training is liable to acquire. As I stated again and again, directly and by implication, the training is entirely adequate in one direction, namely in the mental development so much admired by "Guyosite," in Guy's sisters, and the knowledge of the "care and comfort of the patient." That was never in question.

Your space is too valuable and your readers' patience too exhausted for me to prove my statements one by one, or to dispose of all the irrelevancies and red herrings introduced by some of your

correspondents; they are either true or false, believe them who wish. The facts are too well known by the parties concerned to admit of argument; if I have not stated the whole truth, I have stated three quarters of it; if nurses do not sometimes spend their whole stringed existence in one ward, they spend 11 to 13 months of it there; if they do not spend 12 months in special departments, they sometimes spend 9 to 11 in them; and if nurses who have had a predominantly medical training always get strings in a surgical ward, and vice versa, I am a deliberate liar and black is white. So far it is simply a question of fact. The parties concerned, if they forget their initiation, know on which side the truth lies: I leave it at that. "Guyosite," alone amongst your correspondents, seemed to consider that there was anything at all in what I said, the others were too busy scenting red herrings to see that there was any point at all.

I will not attempt to deal with individual points in my letter, but will reduce it, if possible to its lowest denomination.

The whole question is: Is it accepted that it is an ideal condition that a nurse, who may or may not have had an evenly balanced preliminary training, shall, at the discretion of the powers that be, or the Laws of Chance, or an Act of God, spend at least seven-eighths of the most important period of her training in one ward of the hospital. If it is, there is no more to say until the slow process of evolution and education or the merciful force of outside pressure, gives me the feminine privilege of the last word.

If it is not so accepted, the arrangement must be changed and in my opinion every trained nurse should have spent half her time as strings in a Medical Ward and half in a Surgical, and it should be her right by statute, and if any nurse is to be made use of in Out-Patients, it should be for a very short time only. That is putting it as simply as possible; it appears simple to me. I have no time to reargue the whole case. Your correspondents did not give any argument against the arrangement, presumably there is none. The only one I ever heard was that it took six months for a head nurse to learn the ways of the ward and the idiosyncracies of the staff. That argument does not do justice either to the intelligence of the nurses or the common sense of the staff and has no force whatever.

As far as the question of loyalty is concerned, if it be loyal ostrich-like to bury ones head in the sand and say, as far as the position permits, "Everything is for the best in this best of hospitals and it becomes better and better every day and in every way" then I also "fear that E. R. must be an exception."

With apologies for monopolising your space.—Yours sincerely,

E. J. R.

The Musical Society.

DEAR SIR,—The Guy's Hospital Musical Society is a mixed one, open to members of the Medical and Nursing Staffs and Students. For this reason it does not draw funds from the Clubs' Union, but is compelled to beg for subscriptions to carry out its work.

This year a great effort is being made and not only has the Society been reorganised and the Orchestral Section re-opened, but also the members have undertaken the formidable task of the production of an opera—"Trial by Jury" and a cantata—"The Revenge"—with full orchestra. Support is not lacking for already the membership has reached three figures.

To carry through this programme music must be bought, a Conductor remunerated, costumes hired, royalties paid, and incidental expenses met. Below is a list of subscriptions to date, for which the Society is very grateful. Expenses, however, are extremely heavy and so far receipts have only just met these.

We feel sure that there are others interested in the welfare of Hospital Music and from these donations are earnestly solicited. We believe that if you will be good enough to make known, through the medium of the GAZETTE, the present condition of the Society, this financial support will be forthcoming.

Subscriptions should be addressed to the Honorary Treasurer, W. M. Mollison, Esq., or to the Hon. Secretaries.—We are, Sir, yours faithfully,

CHAS. E. GALLAGHER,
MAURICE MITMAN,
Hon. Secs.

Guy's Hospital,
S.E.1.
22nd November, 1923.

SUBSCRIPTIONS.

	£	s.	d.
His Grace the Duke of Leeds	1	1	0
H. Cosmo O. Bonsor, Esq.	5	5	0
Major-Gen. V. Dawson	1	1	0
Dr. J. Fawcett	1	1	0
Mr. R. P. Rowlands	1	1	0
Dr. W. H. Hunt	1	1	0
Dr. E. P. Poulton	1	1	0
Mr. W. M. Mollison	2	2	0
Mr. J. Magnus Redding	2	2	0
Mr. Lewin Payne	2	2	0
Mr. J. J. Conybeare	1	1	0
The Matron	1	1	0
Sister Evelyn	0	10	6
Sister Out-Patients	0	5	0
Sister Martha	0	5	0
Sister Patience	0	2	6
H. W. Applin, Esq.	0	5	0
Total	£21	7	0

Guy's Hospital War Memorial Fund.

STATEMENT OF RECEIPTS AND PAYMENTS.
From May 16th 1918, to October 30th, 1923.

RECEIPTS.

	£	s.	d.
To Subscriptions and Donations ...	5,620	19	2
„ Interest on Deposit and Investment	311	7	8
	£5,932	6	10

PAYMENTS.

			£	s.	d.
By War Memorial Trust Fund— Amount invested in the Corporate name of the Hospital to form a Trust for the Endowment of Scholarships etc.			3,000	0	0
„ War Memorial Arch—					
Bath and Portland Stones, Ltd. ...	1,652	6 3			
Guy's Hospital Works Department (Foundation Work and Erection of Stands for Unveiling Ceremony by H.R.H. The Duke of York, K.G., on July 15th, 1921)	211	14 4			
Sculptor's Fee ...	239	14 6			
Architects' Fees ...	159	17 0			
			2,263	12	1
„ Secretarial, Administrative and General Expenses—					
Management, includcluding Clerical assistance for War Memorial Volume...	146	18 3			
Printing, Stationery, Postage & Appeal...	137	3 5			
Blocks from Photographs, etc., used in Guy's Hospital Gazette and War Memorial Volume of Reports	41	15 7			
Auditors' Fees ...	10	10 0			
Sundry Payments ...	7	7 6			
			343	14	9
			5,607	6	10
„ Balance, represented by Cash at Bank—					
Reserved for Memorial in College Dining Hall	300	0 0			
For Contingencies ...	25	0 0			
			325	0	0
			£5,932	6	10

We have audited the above Statement of Receipts and Payments with the Books and Vouchers, and find it in accordance therewith. The cash on Current Account has been verified by a Certificate obtained from the Bankers.

W. J. CURRY, Clerk to the Governors.

S. H. CROUCHER, Clerk to the Dean.

Auditors.

H. COSMO O. BONSOR, *Chairman.*

M. S. PEMBREY, *Hon. Secretary.*

October 30th, 1923.

I Once Had the Old-Fashioned Broom, Dears.

(With apologies to the "Dear Little Doll.")

I once had the old-fashioned broom, dears,
The oldest broom in the world;
It had been used for years, dears,
And very few hairs unfurled!

And for months I swept the wards, dears,
When I was the Junior Pro.;
I swept, and cleaned the brights, dears,
Was queen of the sluice you know!

At first I consoled myself, dears,
Shedding the tears o'er my sweep;
That in a "Blue Frock" I would end, dears,
And watch all my nurses weep!

But I have grown wiser, dears,
In the months that come and go;
The jolliest time of all, dears,
Is on night as the Junior Pro.!

Now I found my ancient broom, dears,
I fear it has had its day;
A wardmaid had finished that broom, dears,
And there aren't any hairs they say!

There's dawned a wondrous day, dears,
When our sweeping are o'er;
Wardmaids are armed with brooms, dears,
And little lambs sweep no more!

The Editor of Guy's GAZETTE, dears,
Wants members of Nurses' Home—
To exchange brooms for pens, dears,
And in literary worlds to roam.

ANON.

Notices.

Prizes offered by the British Medical Association for Essays by Students.

The Council of the British Medical Association will, in March, 1924, award Prizes of £10 each, for the best Essays on "Three Cases illustrating Different Causes of Dyspnœa," by final-year Medical Students, *viz.*: one Prize in each of the following Groups of Medical Schools:—

Group 1.—University of Aberdeen; University of St. Andrews (University College, Dundee).

Group 2.—Queen's University of Belfast; University of Dublin (Trinity College); National University of Ireland (University College, Cork; University College, Dublin; University College Galway); Royal College of Surgeons in Ireland (Schools of Surgery).

Group 3.—University of Birmingham; University of Bristol; University of Wales.

Group 4.—University of Durham; University of Leeds; University of Sheffield.

Group 5.—University of Edinburgh; School of Medicine of the Royal Colleges.

Group 6.—University of Glasgow; Anderson College of Medicine; Queen Margaret College School of Medicine for Women; St. Mungo's College.

Group 7.—University of Liverpool; Victoria University of Manchester.

Group 8.—London: Charing Cross Hospital Medical School; King's College Hospital Medical School.

Group 9.—London: Guy's Hospital Medical School; London Hospital Medical School.

Group 10.—London: London (Royal Free Hospital) School of Medicine for Women; University College Hospital Medical School.

Group 11.—London: Middlesex Hospital Medical School; St. Mary's Hospital Medical School.

Group 12.—London: St. Bartholomew's Hospital Medical School; St. George's Hospital Medical School.

Group13.—London: St. Thomas's Hospital Medical School; Westminster Hospital Medical School.

2. The Prizes will be awarded to the Authors of the Essays deemed by the Examiners to be the best sent in from the respective Groups, but if no Essay received from a Group is considered by the Examiners to be deserving of a Prize, no Prize will be awarded in respect of that Group.

3. The Essays, which must not exceed 5,000 words, should be clinical in nature, and must include concise notes of three cases personally observed by the student.

4. Essays should be plainly written or typed on foolscap paper (one side only), and must reach the Medical Secretary, British Medical Association, 429, Strand, London, W.C.2, *not later than January 31st*, 1924. Each Essay must be signed by a pseudonym, and be accompanied by a sealed envelope marked on the outside with the pseudonym, and containing inside a signed and dated statement that the Essay has been the *bona-fide* work of the competitor, and that he or she has not yet passed the final professional examination; together with particulars of his or her name (including full Christian name or names), address and Medical School.

5. The Essays received will be adjudicated on by Examiners appointed by the Association from among Members of the Association *not* resident in the area of the particular Group. The decision of the Examiners will be final.

ALFRED COX,
Medical Secretary.

429, Strand, London, W.C.2.
October 17th, 1923.

Liverpool and North-Western Guy's Re-Union Dinner.

The above Dinner will be held at the North Western Hotel, Lime Street, Liverpool, on Wednesday, December 12th, at 7.15 p.m.

Price, 12s. 6d., exclusive of wine, to be paid at the Dinner.

Would all who wish to be present kindly notify me.

Music.

HORACE MATHER,
Hon. Sec.

73, Rodney Street,
Liverpool.

Pass List.

3rd Examination (M.B., B.S.) for Medical Degrees.

October, 1923.

G. W. Elkington. D. M. MacManus.
J. H. M. Lloyd. W. M. Ramsden.

Supplementary Pass List.

Group II.

G. F. Gibberd. R. E. Lane.

Appointment.

P. H. Ward, M.R.C.S., L.R.C.P., to act as Principal Medical Officer for Northern Rhodesia, during the absence on leave of A. W. May, M.D., with effect from the 17th September, 1923.

Reviews.

Guy's Hospital Reports. Vol. 73 (vol. 3, Fourth Series). No. 4, October, 1923. Henry Frowde & Hodder & Stoughton, 1, Bedford Street, W.C.2. Price 12s. 6d. net.

This number is more controversial than usual and in parts is even heretical. Opening with an interesting "life" of that famous old Guy's man, the late Sir George Savage, it then presents two articles on the advisability of tonsillectomy as a means of curtailing and preventing recurrences of rheumatic infections. The first of the two papers, that by Dr. G. H. Hunt and Dr. A. A. Osmond, concludes "that enucleation of the tonsils is not a certain preventive of a recurrence of acute rheumatism," and again that the "figures" (collected by the authors) "do not support the contention that operation in such cases" (where there are "local indications of tonsillar infection with enlargement of the neighbouring lymphatic glands") "diminishes the liability to rheumatic infection."

The following paper, by Dr. H. J. Starling, comes to the opposite conclusion, namely, that "enucleation of the tonsils is a most valuable means by which the acute attack may be ended and further infection prevented." The two points of view are both agreed at length and provide much subject for thought.

In the next paper, "Cardiac Murmurs and their Causation," Dr. J. M. Gill opens up what we believe is an entirely new line of thought. At one blow he wrecks the modern ideas of the causation of cardiac bruits. "When we compare the clinical records of murmurs with post-mortem results it is, I think, obvious that no mere mechanical explanation can possibly be adequate. Something more is necessary, and that is furnished by these records." These records and the cardiographs and sphygmographs that illustrate them, attribute all cardiac murmurs to auricular fibrillation. That is his theory, which is fully illustrated by cases and tracings. It will be interesting to see what support he receives from other cardiologists.

Other articles in this number include one from Mr. Ormond on the "Causation of Cataract," one from Mr. Slesinger on "Factors in the prevention of operative mortality in exophthalmic goitre," "The Gastric Germicidal Barrier," by Dr. F. A. Knott, and several excellent reports of cases, recently in the wards of the Hospital.

"Blues" Committee.

Instructions have been given to Arthur Shepherd, of 7, Cornmarket Street, Oxford, to supply the Hospital "Blue," ties, scarves, and hat bands only on production of the printed authority of the Clubs' Union; no colours will in future be obtainable without this authority.

Old Hospital "Blues" who wish to obtain these colours should apply to the Secretary of this Committee, who will obtain authority for them.

JOHN SIMONS,
Hon. Sec., Blues Committee.

Rugby Football.

GUY'S v. CAMBRIDGE UNIVERSITY.

It was a glorious afternoon for football at Honor Oak Park on Wednesday, November 7th. When these sides lined up, neither side was actually at full strength—Cambridge were without their Captain—MacMyn—D. C. Cumming and H. H. Fagnani, also A. T. Young, their scrum half. Guy's missed the services of C. L. Steyn, G. R. Mostert and G. G. T. Tregarthen. One cannot think that Cambridge lost much by the scrum half alteration, because P. S. Douty, who filled that position did remarkably well, in fact his play was quite a feature of the afternoon. At first we got the ball and some passing was indulged in, but not much ground gained, then came a movement which opened the way for Fellowes-Smith, but he missed his pass, it was a very awkward one to hold. Play then settled in midfield till 10 minutes had gone by, when from midfield Douty, Francis and Gardiner got away and Hamilton-Wickes, evading the Hospital tacklers, sent in Gardiner with a good try. Another 10 minutes

went by during which B. G. Scholefield headed a rush that carried us to the Varsity "25," but a free kick drove us back and from half way the Cambridge backs were away again, this time Dallas-Conte took the inside pass and his try was by the uprights. The third Cambridge score, gained by R. H. Juckes just on half-time, came by good passing via Douty, Francis, Gardiner, Wickes, Lowry and Juckes, and it was carried out at such a pace as almost to command success. All three tries were easily placed and Francis made no mistake about converting them.

After half-time our forwards, of whom one must heartily commend De Wet Vorster for his vigorous loose play, gained the upper hand, but even so, all the scoring that we could do was a try by Fellowes-Smith, from a pass by Meissner and a splendid conversion from Neser from almost the touch-line. Our defence, of whom Meissner and Spence were the best, had still to put their best forth to keep Cambridge out, though it cannot be said that the visitors took many risks and preferred safe play to uncertain initiative. Guy's were not at their best, but one cannot always be, the tackling was very poor and one must impress the necessity of going low and hard. Both Hamilton-Wickes and his centres are hard strong runners and take some holding; no doubt this little weakness of ours will soon be overcome.

It was a good hard game and Cambridge deserved their win. Their scores were well conceived and brilliantly carried out, and we who watched with partisan feelings, could but trust that ere long our own side will regain that dash and devil that has long made us a notorious and victorious side.

Result.—Cambridge University 3 goals (15 points), Guy's Hospital, 1 goal (5 points).

Guy's Team.—W. Badenhorst, J. W. Finnemore, H. Graham-Davies, J. G. Van Schalkwijk, G. Fellowes-Smith, W. Meissner, J. D. P. Spence, E. E. Neser, N. M. Holloway, B. G. Scholefield, F. Bekker, H. De Wet Vorster, G. G. Cameron, J. W. Schabort, E. W. Hutchinson.

GUY'S v. COVENTRY.

At home to Coventry on November 10th. The Hospital were at their best, and reminded us that, perhaps after all we are not such a bad side. The crowd to witness the match was very thin, and many who had attended our matches went off on this day to see Oxford University pursue their conquering way at Blackheath.

We were much heartened by the fine exhibition of the backs, and would at this point emphasise the two facts, which had impressed us every time we witnessed a Hospital match. Our insides (halves and threes) do not go straight enough, nor do they tackle the opposing threes and halves thoroughly enough. Go into him, hard and low! Now, against Coventry we played exceedingly well and Coventry played badly. That is, A. Elton, Coventry's scrum half, neglected his threequarters, he seemed so surprised at seeing his old opponent, F. Bekker, in the scrum, that he had no eyes for his own threequarters, hence they got few chances, and because their halves were off colour their attack suffered badly. Moreover our forwards were much the better—Scholefield, Bekker and Du Toit were the best. J. D. P. Spence, at full back, pleased every one with his display.

An early penalty, well taken by Neser, was signalled as a goal by our flag waver, but not by theirs and Mr. White, the Referee, said it wasn't either. We had several little "try outs," but Finnemore couldn't quite manage it. Then Fellowes-Smith went away with much more pace than anyone dreamt he possessed, but Morton accounted for him. Before the half-time Finnemore got two tries, the first from a line out, inter-passing cleverly with Meissner; the second, passing went his way and Steyn made a neat opening for the final dash. Finnemore dashed for the line with very fine determination; his alround improvement is very noticeable. One excellent piece of play by Neser nearly got us a try and an admirable follow up at full speed by Spence almost another, but at half-time no more than 6 points was our score.

Resuming, Finnemore got another try. Next Du Toit sent Tregarthen over, and later Steyn passed to Van Schalkwijk who scored a beautiful try behind the posts—Spence converting. Now who can complain of this win? No one. But it is a fact that we do not do quite as we ought in about alternate matches. Against Coventry the side gave an exhibition of jolly good football. The team are very popular and one notices their perpetual sporting play, although Meissner and the forward who rather annoyingly (on the blind side) got in his way, did seem to have occasional hurried conversations.

Result.—Guy's 1 goal 4 tries (17 points) to Nil.

Guy's Team.—J. D. P. Spence, G. Fellowes-Smith, H. Graham-Davies, C. L. Steyn, J. W. Finnemore, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, B. G. Scholefield, N. M. Holloway, F. Bekker, G. G. T. Tregarthen, J. W. Schabort, G. G. Cameron, P. J. Du Toit.

GUY'S v. LONDON SCOTTISH.

The above fixture attracted a real good crowd to Honor Oak Park on November 17th, the last home fixture before Xmas. The match was worthy of the crowd, for it was real hard going right up to the very end. The Scotsmen are a strong side, very virile, and had out E. MacLaren, the International

centre, A. D. Dobbie, a Trials Centre, and G. C. Aitken, the Oxford Blue. F. Bekker was away from our pack, and this brought in G. G. T. Tregarthen. Right well did Tregarthen do. We got the ball very often at first and Meissner worked the scrum cleverly; some of his passes were skilful in the extreme. Against him was A. A. Crook, the Army half, and our man compared very favourably with the Army man. Good passing took place, and from one fine round, Fellowes-Smith, the last to receive, romped away, and breaking Ponsonby's tackle, he scored in the corner. The Scotsmen now pressed, but Spence, at full back, was very sound. Lofty kicks he had to field and never did he miss one; we were playing against the wind. Then a swift round of passing sent Finnemore away to plunge over. The awkward angle was almost negotiated by Neser's kick. Several more passes were started, but Steyn passed badly to Graham-Davies; the latter has a famous burst through, but he cannot be expected to catch an oblong ball or whatever shape a Rugby ball really is if the elusive thing comes about knee high. Now MacLaren showed his worth; at great pace he went through our men to pass to Ross who scored dead behind, but no goal resulted. 6 points to 3 in our favour and the wind with us for the second half.

It hadn't gone very far before MacLaren again did us down; he cleared the way to midfield, and then sent Millar off to run more than half-way and again get a try so well placed that a goal looked certain, but fates were kind to us, the try was not converted. We tried very hard to get ahead, but it couldn't be done. Our forwards, honestly were not quite so good as the Scotch. Du Toit was early hurt, bad luck for him and us, and took little part in the first half, in the second half he very pluckily resumed, but his knee was very painful. Neser, Holloway, and Fouraker were excellent. Five minutes to go and both sides still hard at it. Aitken, now playing fly half, went through us again and Ross, ever handy, scored the try that beat us.

Result.—London Scottish 3 tries, Guy's 2 tries.

A very fine enjoyable match; we did out utmost, but there is a fly to be removed from the ointment. Our tackling is at times very bad, and it loses us matches. One almost thinks that neither MacLaren nor Aitken should have been allowed to go half the distance they did. J. D. P. Spence, playing at full back, gave a very polished exhibition of how that position should be filled.

Guy's Team.—J. D. P. Spence, G. Fellowes-Smith, H. Graham-Davies, C. L. Steyn, J. W. Finnemore, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, E. H. Fouraker, N. M. Holloway, B. G. Scholefield, G. G. Cameron, J. W. Schabort, G. G. T. Tregarthen, P. J. Du Toit.

SPECIALITIES.

Doctor's China Tea.

Messrs. HARDEN BROTHERS, & LINDSAY, LTD.,
23, Rood Lane, E.C.3.

"Doctor's China Tea" is a Tea to be recommended to anyone subject to Indigestion, as it is free from colouring matter and tannin, being made from the young leaves of the plant.

This Tea does not cause constipation like some of the strong Teas, which are full of tannic acid. It has a delicate flavour, and is pleasant to the palate.

GUY'S HOSPITAL GAZETTE.

(ESTABLISHED 1872.)

A Journal of Hospital News, Medicine, Surgery, and Dentistry.

Published on alternate Saturdays. Price **9d.**

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Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone, Hop 1086.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Marriage.

GODDARD—TOVEY.—On the 17th November at St. John's Church, Southwick Crescent, Paddington, by the Rev. A. Stanley V. Blunt, M.A., O.B.E., Vicar of the Parish, John Theodore Goddard, of 47, Connaught Sq., Hyde Park, youngest son of the late Eugene Goddard, M.D., to Gertrude Mary, elder daughter of the late Charles A. Tovey and Mrs. Tovey, of Redland, Bristol.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

Vol. XXXVII., No. 924.] December 8, 1923. [Ninepence.

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Passim.

AS we have stated in previous issues a series of improvements will be started in the new volume of the GAZETTE, commencing in January of next year. The present style and printing of the cover will be maintained, though the quality of the paper will be improved and a few alterations will be made in the printing and arrangement of headlines. A change will be made in the position of the index to each issue. This will always appear at the top of the third page of advertisements, just inside the cover pages. At the present time the position of the page, on which the index is printed, varies from time to time according to the number of advertisement pages preceding it. The above alteration will be introduced to ensure the position of the index being constant in each issue.

The complete index to the present volume of the GAZETTE will be issued as a supplement to one of the numbers early in the coming year. Those readers who desire it may have their numbers of the present volume bound, in light or dark blue covers, by forwarding them to the Wills Librarian. Binding covers may also be obtained from Messrs. Ash & Co., Henry Street, Tooley Street, S.E.1.

ON Tuesday last a lecture on the Medical Service under the National Insurance Act, was delivered at the Hospital by Doctor Cardale, Chairman of the London Panel Committee. Before passing on to the working of the Act, Doctor Cardale gave a brief resumé of the conditions of general practice in the old days and dwelt on the difficulties of the medical man, especially in large industrial areas. A point on which he laid stress, and which was alleviated by the introduction of the National Insurance Act, was that in these areas were many of the working classes who could not afford to pay for the individual attention of a medical man. It was this fact which in many districts gave rise to the Friendly Societies.

A description was then given of the present Act and of its working and of the advantages which accrued both to the medical man and to the community by its institu-

tion. The lecturer dwelt upon the relations of the doctor to the Ministry of Health, and the constitution of the various committees appointed throughout the country. Special emphasis was laid upon the preservation of adequate case records by each panel practitioner and on the proper signing of certificates.

Dr. Cardale next foreshadowed a widening of the scope of the Act in the near future. Specialist services for panel patients would probably be introduced. It was interesting also, in view of the present overcrowding in the profession, to hear that dependents of insured persons may also be included in the schemes for medical benefits. This great increase in the number of those on the panel, together with the decrease in the number of patients allowed to each individual doctor, would, Dr. Cardale assured us, give rise to a great call for more medical men.

The lecture was of undoubted value to those who heard it and was of great interest in view of the recent publicity given to the panel system. There were many present and a warm vote of thanks was accorded to Dr. Cardale at the close of his lecture.

A GREAT change has been made this year in the Hospital Christmas Cards, which are on sale in the Wills Library. The new series consist of plain, but neat cards with a stamped crest, in Hospital colours, on the front, and a bow of Hospital ribbon let in at one side. These cards, which contain no illustrations of the Hospital, are, we think, a great improvement on the former series and should prove a great attraction to all. They are the gift of Messrs. Ash & Co., who are devoting to the Hospital all proceeds from the sale. The cards may be obtained from the Wills Librarian, at the price of fourpence each, and we advise all to make an early application for them.

THE Hon. Treasurer of the late War Memorial Fund wishes to acknowledge with thanks the receipt of £1 8s. 3d., being the balance of receipts from the sale of memorial cards on Armistice Day. This sum has been forwarded to the Guy's Hospital War Memorial Scholarship Fund.

THE Guy's Hospital Ladies' Association has sustained a very great loss by the death of Mrs. Pye-Smith, widow of Dr. P. H. Pye-Smith, Physician to Guy's Hospital. At the foundation of the Association, in October 1895, Mrs. Pye-Smith was elected Honorary Treasurer, and this office she held for over eighteen years. The first London Working Party took place at her house, in Brook Street, on November 5th, 1895. Mrs. Pye-Smith was keenly interested and took a very active part in the work of the Association until her death on November 20th last. As President of the Flower Stall she rendered the most enthusiastic service at the Garden Fête which was held, at Guy's, in June, 1922.

ON Saturday, December 8th, at 4.30 p.m., an Exhibition and Sale of Etchings, Colour Prints, Pottery, etc., will be held in the Chapter House, St. Thomas' Street, S.E.1., when the proceeds will be given to the Save the Children Fund, the Oberammergau Relief Fund, and the Funds of St. Saviour's Parish. No charge will be made for admission, and no one will be urged to make purchases. The Exhibition will close at 7 p.m. Teas will be provided. The exhibits will be sold at moderate prices.

Pass List.

Royal College of Surgeons.

L.D.S.

Final Examination.

Part I.

H. R. Allen.
R. C. Ballard.
T. S. L. Barritt.
A. R. H. Bennett.
W. S. Brittan.
L. S. Carter.
W. O. Cooksey.
D. H. Couch.
H. M. Doubleday.
A. H. Dyke.
V. R. Estment.
E. H. Fouraker.
F. H. Goddard.
L. A. Jones.
W. V. A. Hodges.
L. S. J. Kanaar.
C. D. Lingwood.
M. W. Meskin.
L. Nurick.
E. Z. C. Pearson.
E. V. Potts.
N. H. Saint.
S. S. Sanderson.
T. Vallange.
V. C. Warr.
L. C. Willis.

S. A. Pleasant.
H. S. Spencer-Payne.
F. R. Taylor.
G. G. T. Tregarthen.
W. J. Barnard.
W. E. Berwick.
F. F. Brayfield.
W. E. Brigham.
P. J. Du Toit.
E. F. Farmer.
C. H. Fox.
M. B. Goolding.
G. L. Gould.
A. Hirschberg.
A. R. Jackson.
A. C. Luck.
K. F. Pedley.
C. E. Bowen.
F. M. Ackroyd.
R. G. Pengelly.
G. T. Thompson.
J. B. F. Tunstall.
E. Greco.
D. S. Hammond-Williams.
W. Nicholls.
J. C. Rowbotham.

Part II.

R. C. Ballard.
T. S. L. Barritt.
W. S. Brittan.
L. S. Carter.
W. O. Cooksey.
D. H. Couch.
A. H. Dyke.
E. H. Fouraker.
L. A. Jones.
W. V. A. Hodges.
C. D. Lingwood.
M. W. Meskin.
L. Nurick.
E. Z. C. Pearson.
E. V. Potts.
N. H. Saint.
S. S. Sanderson.

T. Vallange.
V. C. Warr.
L. C. Willis.
C. A. Wakeford.
T. B. Berry.
I. G. Coutts.
C. H. A. Fido.
S. G. French.
L. F. Handford.
J. E. Lloyd.
H. Metheringham.
W. Orsmond.
G. A. Lawson-Brown.
A. E. Nelson.
E. H. L. Sander.
R. S. Schlimmer.
J. G. Van Schalkwijk.

Society of Apothecaries of London.

Midwifery.

F. R. Ratnager.
E. W. Warne.

Notices.

Guy's Hospital Clubs' Union.

Notice is hereby given that, at a meeting of the Clubs' Union Council, held on November 20th, 1923, Rule 17 of the Guy's Hospital Clubs' Union, page 17, Clubs' Union Year Book, 1923—24, was altered and will now read as follows:—"Students entering the Hospital for Special Classes may be admitted to the privileges of membership of the Union (exclusive of the GAZETTE and REPORTS) upon payment of one quarter of the current annual subscription."

N. L. LLOYD,
Hon. Sec.,
Clubs' Union Council.

Guy's Hospital,
December 5th, 1923.

Appointments.

E. Horace Richards, M.B., B.S. Lond., Clinical Assistant, Ear, Nose and Throat Department, University College Hospital; and Surgical Registrar, Central London, Throat, Nose and Ear Hospital.

H. G. R. Canning, L.R.C.P., M.R.C.S. L.D.S., Honorary Dental Surgeon to the Miller General Hospital for South East London.

M. D. Price, Medical Superintendent, Mongonui Hospital, New Zealand.

Papers by Guy's Men.

Hector C. Cameron, M.D., F.R.C.P. Discussion on the Nervous Child.—*B.M.J.*, 1923, ii., p. 963.

Frank Cook, M.B., F.R.C.S., and Vernon E. Lloyd, M.C., M.D. A Case of Albuminuria of Pregnancy.—*Lancet*, 1923, ii,. p. 1133.

C. S. Lane Roberts, M.S., F.R.C.S. The Relation of Syphilis to Obstetrics.—*B.M.J.*, p. 971.

F. D. Saner, M.B., B.Ch., F.R.C.S. and G. T. Mullally, M.C., M.S., F.R.C.S. Discussion on the Treatment of Acute Primary Infections of the Hand.—*B.M.J.*, 1923, ii., pp. 1028, 1029.

G. H. Hunt, M.D., F.R.C.P. Intermittent Precordial Pain.—*Practitioner*, 1923, cxi., p. 406.

H. W. Barber, M.B. Case of Prurigo Nodularis.—Proc. Roy. Soc. Med., Sec. of Dermat., 1923, xvii., p. 3.

—. (1) Case of Anetodermia Musculosa. (2) Two Cases of Exfoliative Dermatitis with Intense Pigmentation.—*Ibid.* p. 6.

W. H. Ogilvie, M.Ch. Three Cases of Myositis.—*Ibid.*, Sec. of Orthopœdics, p. 6.

Calcification.

CLINICAL LECTURE By J. HOWARD MUMMERY, C.B.E., D.Sc., F.R.C.S., L.D.S.Eng.

What do we mean by Calcification?

We may perhaps define it as the permeation of certain soft tissues of the animal body by lime salts which in the case of the teeth and bones renders them capable of resisting strain and performing their various functions.

In the lectures which have immediately preceded this one you have been shown whence the cells are derived which elaborate the calcific matter and their arrangement in the formative tissues of the tooth as the enamel organ, the dentine papilla and the follicle or sac which encloses the growing organ. From these different tissues are derived, respectively, the enamel, the dentine and the cement.

The subject of calcification of the teeth is so intimately bound up with certain chemical and physical phenomena that it will be well to consider briefly some of these in the first place in order that it may be made clear, at all events in some degree, what part these physical agents take in the process.

The growth and development of the different tissues of the body have been supposed to be so intimately associated with vital manifestations, so closely connected with the phenomena which we call life, that purely physical processes associated with them have been ignored, or at all events considered of so little importance in the living body that very little attention had been given to them.

In recent years, however, many writers have shown that physical processes are inextricably bound up with vital manifestations. The same forces which combine to form the diamond and the ruby also produce the shell of the mollusc and the carapace of the turtle and play their part in building up the bony skeleton of man and carrying out various physiological processes in the human body.

The passage of substances through membranes, the physical phenomena of filtration and osmosis are intimately associated with the living cell. But while we acknowledge this intimate association of vital and physical phenomena, we must not allow these considerations to carry us too far and lead us to conclude that these processes are in every sense identical with those which occur in artificial experiments, carried out under other conditions and in a different environment.

Physiological Factors in Calcification.

Viewing the question of calcification from the physiological standpoint we may briefly consider what are the principal factors which initiate and regulate calcification, but this part of the subject is still very obscure and very imperfectly understood.

The calcium salts must come from the blood where the carbonate and phosphate of lime "are held in solution or suspension by the proteids" as Wells says in his "Chemical Pathology," either as the carbonate and phosphate themselves or as calcium—ion—proteid compounds, or both.

We know that those substances which conduct electricity are called electrolytes, and when a current of electricity is passed through them certain constituents of the molecule are set free. These elements of the molecule were called by Faraday "ions" or "travellers" and it is in this form that the calcium salts are supposed to be combined with the proteids of the blood.

It is considered that this suspension of the lime salts is in an unstable condition owing to the small amount of calcium in the blood, and to changes in its alkalinity or the composition of the calcium salts.

We know that erratic deposition of calcium salts takes place in pathological tissues, as tumours and necrotic tissue. This deposit is preceded by progressive changes in the tissues affected; there is some previous degeneration or loss of vitality before these calcareous substances are deposited.

To a less degree this appears to occur in all tissues in which deposit of lime salts occurs. Sims Woodhead drew attention to this when he said in speaking of calcification, "We have to deal with the accumulation of lime salts within the stroma or cells of a tissue which has undergone certain preparatory changes, in the way of formation of a more or less homogeneous ground substance, but has not suffered total loss of vitality." The fact that these preparatory changes take place in tissues undergoing calcification has led some authors to claim that such substances as enamel and

cement are dead and out of the pale of nutrition, but they are in no wise justified in forming such a conclusion. There are no dead substances in the living body, except those due to pathological changes.

Much attention has lately been given to the part played by the ductless glands in calcium metabolism. There is considerable evidence to connect the pituitary, the thyroid and the parathyroid with the regulation of calcification, although much of the evidence adduced is vague and purely speculative, and further experimental work is necessary before drawing any definite conclusions on this most complicated and obscure question.

Sir Arthur Keith has made some very interesting observations on the connection of the pituitary with the obscure disease called acromegaly, the abnormal over-development of parts of the body. The process of growth "which should cease when the adult stage is reached" has been reawakened, and he finds that "the disorderly enlargement of the pituitary is directly related to this resurrection of the process of growth." Many of the views, however, regarding the specific action of these secretions are not so well authenticated, and Mrs. Mellanby has described experiments which show how easily the size, structure and probably also the function of a gland like the thyroid can be influenced by minute alterations in the diet, and that these changes are apparently independent of the calcification processes in the bones and teeth." She considers that the results of these experiments show "how difficult it is to argue about the specific action of a ductless gland, and that even if the ductless gland hypothesis be sound, it is obvious that the activities of these glands, like many other organs of the body are directly under the influence of the quality of the diet."

We have heard a great deal in late years of the "hormones" or chemical messengers and their action on nutrition and secretion. These substances are employed in the regulation or control of the activities of the body. Starling and Bayliss have shown that the substance they named "Secretin" controls the secretion of the pancreas and is produced when acid enters the duodenum. A "wireless" message is sent to the pancreas which immediately responds by pouring out the right amount of secretion. Belonging to this class of hormones are other substances of the same nature contained in the diet. A very minute quantity only is required, but without this quantity a diet which may sustain *growth* is inadequate to maintain *life*. These substances have been named the accessory food factors, or "vitamines." Three separate vitamines have been separated:—

1. The antiscorbutic, the absence of which from the diet gives rise to scurvy.
2. Water soluble B. vitamin, the absence of which from the food causes beriberi.
3. Fat soluble A vitamin.

It is this last with which we are more immediately concerned, as it has been shown by Mrs. Mellanby in experiments on the growth of the teeth in puppies that this food factor has a definite influence upon the allocation of calcium salts to the bones and teeth. It would appear that the incorporation of the proper amount of calcium salts with the teeth is dependent not so much on the amount of calcium in the diet as on the action of some determining factor in the food which is the cause of the efficient allocation of calcium salts to the forming teeth. This factor would appear to be a diet containing an abundance of those articles with which the fat soluble A accessory food factor is associated, such as cod liver oil and butter. A diet which is otherwise adequate, but deficient in these substances brings about defects in the teeth of puppies, there is delay in the loss of the deciduous teeth and in the eruption of the permanent set, and defects in the enamel and dentine.

The calcium may be present in the food in such a form that it can be easily taken up by the blood, but if this accessory food factor is absent the cells of the formative organs of the teeth are unable to perform their calcium-separating functions.

If a diet contains abundant calcium and vitamin A the teeth and bones are well calcified, but when the vitamin is absent, however much calcium may be present the teeth are imperfectly formed. Fortunately most food stuffs that contain much calcium also have an abundance of vitamin A. From these and other experiments, as Sir Arthur Keith says, it now seems possible that the substances named vitamins my influence and alter the growth mechanism of the animal body.

To briefly recapitulate what we have said about the physiological factors in calcification.

We have seen that calcification in organic tissues is to be considered as partially a physical and partially a vital phenomenon, but the two are so intimately associated that no line of demarkation can be drawn between them. It is suggested that there is some force or energy present in the living body that in many instances has the effect of modifying those forces which we recognise as purely physical, but it is probable that could we clearly understand these they would come into line with the known chemical and physical properties of inorganic nature.

From the physiologist's point of view we have to consider what are the factors which regulate calcification in the tissues and the possible effect of the secretions of the ductless glands on calcium metabolism. While there is some evidence to connect certain of these secretions with the control of calcium allocation to the different organs and tissues of the body, the question is still an open one and the conclusions so far arrived at are not based on sufficient or convincing evidence.

With regard to the action of the substances in the diet known as vitamins there is strong evidence to show that the fat soluble vitamin A in the food influences the deposition of calcium salts in the teeth and bones, at all events in the puppies on which the experiments were made.

In the further consideration of the physical forces involved in calcification we may shortly consider the form and conditions under which the lime salts are deposited in the living body.

Graham, in his researches on dialysis, divided substances into crystalloids and colloids, crystalloids having the power, when in solution, of passing easily through membranes, colloids, on the other hand, passing through with difficulty or not at all.

The particles of a colloid solution are in a state of suspension rather than of solution in the solvent. The line of demarkation, however, between crystalloids and colloids is not always very pronounced. The living body is built up of substances essentially colloidal in character. They may either exist in the solid condition when they are called "gels" or in the fluid state when they are spoken of as "sols."

It has been shown that dializing membranes are formed by physical agencies and the so-called osmotic membranes are produced, as well shown in the interesting experiments by Leduc on the formation of the remarkable tubular and plant-like growths he procured in inorganic solutions.

In an experiment which I carried out many years ago on the production of these growths under the microscope with copper sulphate and silicate of potash, not only were the membranes seen to form, but that they acted as dializing membranes was shown by the appearance of crystals on one side of the membrane and colloidal spherites on the opposite side.

In the year 1858 Rainey published his work on molecular coalescence. He showed that lime salts were deposited in colloidal solutions, not in a crystalline but in a globular form, the globules having a very definite structure and arrangement. He also showed that in many animal organisms as mollusca and crustacea, similar forms appeared during the calcification of the shell.

The first experiments were made with a solution of carbonate of potash in gum, which contains carbonate of lime. The bodies which appeared in this solution were globular in form showing concentric lamination and radial striæ.

A similar research was independently carried out by Prof. Harting of Utrecht. His methods of experiment were somewhat different, but gave identical results. His most interesting experiment was one in which small fragments of calcium chloride and of sodium carbonate were placed on the opposite sides of a flat dish containing egg albumen. The dish was left perfectly still and undisturbed for two or three weeks and the salts diffusing through the albumen from opposite sides formed a crust upon the surface. This crust was found to consist of a deposit of carbonate of lime in the globular form, showing a great variety of spheres and discs of varying size. He found that these bodies retained their form after they had been subjected to the action of an acid some portion of the lime having become so intimately blended with the albumen that it remained in combination with it. To this substance, left after decalcification Harting gave the name of *Calcoglobulin*, distinguishing the calcified globular bodies by the name of *Calcospherites*.

This experiment is very interesting to us in studying calcification in the living body for in this instance the same spheroidal bodies were produced in an animal substance (albumen) as appeared in the gum experiments of Rainey.

If the process of production of the calcospherites in the gum be watched under the microscope on a slide, minute granules are seen to appear after a short time which increase in size by coalescing until small globular bodies are formed, the process of molecular coalescence described by Rainey.

The formation of the particles is supposed to be due to surface tension. By this agency the first ultra-microscopical particles are brought together, these further coalesce into visible particles and finally into the large calcospherites. It is surface tension that maintains the form of a drop of fluid and which maintains also the globular form of the soap bubble.

It was shown by Ostwald that when a substance begins to separate out from a solution it always makes its appearance first as a liquid.

In colloidal suspensions the material appears first in the condition of a solution, and as it passes from this to the condition of suspension (the colloidal state) the rounded contour of the liquid form produced by surface tension is maintained, while a process of crystallisation tends to take place throughout this little liquid globule.

This is the explanation which has been given of the first determination of the rounded forms which occur in colloidal substances and there are many phenomena which point to its correctness.

We thus see that the principal physical phenomena with which we are concerned are:

The deposit of lime salts in colloidal solutions as calcospherites.

The formation of dializing membranes.

The transferance of substances through these membranes.

It remains for us to consider what conditions we find in the calcification of the teeth which lead us to suppose that the same forces are at work in the human body.

In calcifying enamel, an outer and an inner ameloblastic membrane have been shown to be present. To what extent these membranes are dependent on purely physical processes it is impossible to decide.

It is demonstrated that calcospherites are found in forming enamel and their contours are revealed in formed enamel by the action of decalcifying acids in caries.

As to the exact method by which the lime salts are diffused through the different layers of the enamel organ we have no certain knowledge, but it is probable that the cells of the external epithelium, which are in intimate contact with the blood vessels of the capsule, separate the lime salts from the blood stream, that the stellate reticulum serves as a storehouse for the calcific material and that the ameloblasts are the cells which elaborate and deposit the lime salts in the forming enamel, these being recuperated by those of the stratum intermedium.

If the ameloblastic membranes serve as dializing membranes the question arises, what are the conditions of the calcifying salts with regard to them. We might conclude that they are conveyed to the ameloblast in the crystalloid form and diffused through the membranes into the colloidal substance secreted by the ameloblast cells, and consequently occur in forming enamel in the colloidal form of calcospherites.

We know from Graham's observations that colloids do not pass through membranes except with difficulty, if, therefore, the lime salts in the enamel organ are in the colloidal condition of fine suspension we might imagine that there is a certain slow diffusion of colloids through the membrane, that they are passed through in small quantities during the slow calcification of the enamel, the membranes as it were, putting the brake on and regulating the rate of the deposition of the lime salts. I am afraid, however, this is purely speculative and incapable of proof.

Another point which is in the same predicament, but which we have to face is the fact that, as shown by Harting, lime salts are not deposited in the form of calcospherites when the phosphate is in excess of the carbonate, yet in enamel where the phosphate enormously preponderates calcospherites are found in abundance.

Pauli and Samec explain this preponderance of phosphate in the finished tissue of bones and teeth much in the following way.

In the early stages of growth albumenoids are present in abundance and the conditions are thus favourable for the deposit of carbonate of lime and we can understand the formation of the calcium carbonate spherites in this early stage. As, however, the metabolic changes go on in the body during growth the albumens break down and their catabolic products as the peptones, etc., take their place. While the solubility of phosphates in albumen is very considerable, they are scarcely soluble at all in peptones and the phosphate in solution is precipitated while the more soluble carbonate only remains in a much smaller amount. It would appear that the contours of the carbonate calcospherites remain in the tissue, but the place of the carbonate has been taken by phosphate.

The process of calcification in the dentine is somewhat different to that seen in enamel. We are familiar with the clear layer seen between the odontoblasts and the calcified dentine, called the odontogenetic zone. This zone appears to consist of a colloidal substance furnished by the odontoblast cell in which the lime salts are deposited.

It is seen that the rounded bodies of the calcospherites, of which the dentine is built up encroach upon this clear layer from above and it would appear that the lime salts are conveyed by the fibril, which is a prolongation of the odontoblast cell and deposited in the colloidal matrix, these salts having been dialysed through the walls of the tubules. As the ameloblast cell secretes both the colloidal substances and the calcifying salts of the enamel so the odontoblast performs similar functions in the dentine. The contours of the calcospherites are well seen at the calcifying margin of the dentine and when the dentine is suitably treated with silver nitrate the concentric layers of these spherites are clearly brought out and the striæ are seen to be extended in laminæ throughout the dentine.

While we see these concentric bodies in the dentine and no radial spherites, in the enamel we find nothing but radial spherites. The contours of the calcospherites shown in the dentine are really made up of calcoglobulin as the teeth had been decalcified. I draw attention to this because we often find the material in which the deposit of lime salts is taking place described as calcoglobulin, but this it seems to me is a misuse of the term as Harting defined calcoglobulin. He spoke of it as the substance left after decalcification—a material which had undergone calcification, but from which the lime salts had been removed by acid except that portion of them which had become so intimately blended with the colloidal substance that it could not be removed by acids, but maintained the contour of the original spherite.

I have endeavoured to explain to the best of my ability what we know about this obscure subject of calcification, but there are some things we think we know about it, others we would like to know and a vast number we do not understand at all.

British Pharmaceutical Codex.

The 1923 edition of this work contains much information useful to prescriber and dispenser.

Comment is offered on the following:—

MIST. MAGNESII HYDROXIDI. Magnesia Emulsion—

This is prepared from Sodium Hydroxide instead of the Potassium salt, and now contains 36 grains of Magnesium Hydroxide to the fluid ounce instead of 24 grains. The dose remains unaltered.

LIQUOR BROMIDI COMP.—

This contains 15 grains each Chloral Hydrate and Potassium Bromide in one fluid drachm, the dose being half to two fluid drachms. Prescribers should note the strength, as in many cases it is probably neither necessary nor desirable to administer 30 grains of Chloral Hydrate.

THYROID—

The British Pharmacopœa designates the desiccated substance, of which, one grain is equal to approximately five grains of the fresh gland. The Codex says that when "Thyroid," "Thyroid Gland," or "Thyroid Extract" are ordered, the fresh substance should be dispensed. With respect to the two first, we agree, but in Hospital practice "Thyroid Extract" is understood to mean the dried preparation. To prevent misconception, prescribers should order the official substance, "Thyroid. Siccum," the dose of which is half to four grains.

A Case of Tuberculous Stricture of the Ileum with Perforation.

H. W., æt. 32, labourer, admitted into Job Ward under Mr. Steward for severe pain in the abdomen on 7th November, 1923.

Family History.—Good. No history of tuberculosis.

Previous Personal History.—When he left school he had a severe cough and was sent to Victoria Park Hospital. He stayed there six weeks and he states that it was thought that there was nothing wrong with his chest.

During the war he was in Mesopotamia and France. When in France he had severe diarrhœa for three days, but was only detained in hospital for one day.

Two years ago he had right-sided pleurisy, after which his doctor suspected tuberculosis of the lung and sent him to a tuberculosis dispensary. He was there told that he had not got tuberculosis. There is no history of loss of morning appetite, night or axillary sweats, and he is not easily fatigued.

Weight—

1914	...	...	9 st. 6 lbs.
1921	...	...	7 st. 3 lbs.
1923	...	...	8 st. 6 lbs.

The history is suspicious of chronic pulmonary tuberculosis with a high resistance, and this is confirmed by Dr. Marshall, who subsequently examined the patient and made the following report:—

Medical Condition.—4th December, 1923.—Spare man; vigorous; no clubbing of fingers.

Heart.—Not displaced; normal.

Chest.—Expansion 3 inches; diminished movement right upper part.

Resonance.—Impaired right apex above and below clavicle, also in right interscapular region. Krönig's isthmus: right 3 c.ms., left 5 c.ms.

Auscultation.—Harsh, almost tubular breathing above right scapula. No adventitious sounds.

Physical signs indicate tuberculous infiltration right apex, an old lesion. Absence of pyrexia indicates disease almost inactive.

History of Present Condition.—He has had recurrent attacks of abdominal pain for two years, which he attributed to "dyspepsia." These started about the same time as the pleurisy. The pain came on in attacks in the lower part of the abdomen about once a week, and lasted from 12 to 24 hours. During the attacks he was temporarily constipated. Ordinarily his bowels are quite regular, and except for the three days in France there is no history of diarrhœa.

He found that the pain was relieved by vomiting, which he induced himself. The attacks came on 3 to 4 hours after food, usually just before he was about to take his next meal. He says that during an attack he was unable to take any solid food as this only made the pain worse.

At about 3 p.m. on 6th he had his usual abdominal pain. At 4.30 the present severe attack came on suddenly when he was at work. He had a sudden stabbing pain starting in the right iliac fossa and shooting down into the genitals. This lasted about a minute then passed off, and he continued his work. He had another similar, but more severe attack at 5 p.m. and another at 5.30. These left him with general pain in the lower abdomen and he states that there was marked soreness in the right iliac fossa. He made himself vomit several times during the night to try and relieve the pain, and as he was constipated he had an enema. He came up to hospital and was admitted next afternoon.

Condition on Admission.—The patient looked ill. His tongue was furred. When seen in the Surgery his pulse was 96 and temperature 99° F. Rectal examination, showed rectum full of fæces, but no marked tenderness. The abdomen was found to be rigid in both lower quadrants; if anything the rigidity was most marked in the right iliac fossa. It was tender on palpation, but not actually painful. The upper abdomen was not rigid.

Operation.—Shortly after admission the abdomen was opened by a right para-rectal incision below the umbilicus. The appendix was first examined and found to be normal. It was not removed. A piece of small bowel was found adherent to the right side of the bladder, and there was a small quantity of free pus (℥iss.) in the pelvis. Examination of the diseased piece of gut showed great thickening of the wall with narrowing of the lumen. The

portion of gut above the thickening was dilated and hypertrophied, that distal being of smaller circumference. There was a localised area of inflammation on the surface of the constriction. A similar, but much less advanced stricture was noticed two or three feet higher up in the gut, but was not involving the whole lumen. The main stricture was estimated to be about four feet above the ileo-cæcal junction. The mesentery corresponding to the stricture was found to be thickened and indurated and the lymph glands were somewhat enlarged. There was no matting of the intestines. About 3 inches of gut were resected and an end to end anastomosis performed. A drainage tube was inserted into the pelvis and the abdomen closed.

Progress of Case.—Patient did not suffer much shock from the operation and the progress was very satisfactory. His alimentary tract and thorax were X-rayed. Report:—Stomach and duodenum: show no abnormality. 6 hours; stomach is empty, meal occupies ileum and large gut from cæcum to descending colon. No constriction or other abnormality is seen. Mobility of small gut cannot be ascertained very well as patient cannot yet support deep palpation.

Thorax: Considerable infiltration of both lungs, probably T.B. Does not appear very active. 27th November, 1923.

He was discharged feeling quite fit on 5th December exactly a month after admission.

Examination of Specimen.—Macroscopic.—The excised portion of gut was cut down its anti-mesenteric border. There was a stricture half-an-inch in length surrounding the gut wall. The lumen of the intestine at this point would admit only a large probe. The gut above the stricture was definitely distended and its wall hypertrophied. A track through which leakage had occurred was found running along the *distal* margin of the stricture to the peritoneal surface. There was no sign of active tuberculosis in the form of tubercles under the visceral peritoneum.

Microscopic.—A section through the stricture showed "typical tuberculous granulation tissue."

Bacteriological Report on pus from peritoneal cavity. No tubercle bacilli could be detected. Cultivation gave a pure growth of B. Coli.

Discussion of Case.—(1) The obstruction had apparently caused the attacks of "dyspepsia" during the last two years, but was not the immediate cause of the symptoms for which the patient came up to hospital. These were entirely due to the perforation setting up an early peritonitis in the lower abdomen.

(2) The stricture although tight did not cause the signs of acute intestinal obstruction, because the contents of the small gut are fluid. Nevertheless, it was a potential source of acute obstruction if a comparatively small mass of indigestible material had become impacted. The attacks of "dyspepsia" were probably due to ileal stasis and temporary obstruction at the site of the stricture.

(3) Tuberculous ulceration of the bowel may be primary (in children), but in adults is more often present in cases of definite phthisis, and is often, like tubercular laryngitis, one of the terminal complications. All the cases of tuberculous ulceration or stricture of the bowel in the Gordon Museum died of advanced phthisis. Tuberculous ulcers of the bowel do not often heal; when they do they are likely, as in this case, to produce scarring and subsequent contraction giving rise to a stricture. (*cf.* Typhoid.)

4. Tuberculous ulcers very rarely perforate. Perforation, when it does occur, usually gives rise to localised abscess formation owing to previously formed adhesions, but in this case the adhesion to the bladder was not sufficient to localise the pus. It is interesting to notice that the perforation was on the distal margin of the stricture. It might have been expected that it would have been proximal, as there the pressure inside the gut must have been maximum.

(5) There is no definite history of diarrhœa which is usual in tuberculous ulceration of the ileum.

I am indebted to Mr. Steward and Mr. Gaymer Jones for permission to publish this case.

W. G. SEARS.

Publications Received.

B.M.J., Isis, New Cambridge, Cambridge University Medical Society Magazine, Cambridge Gownsman, Charing Cross Hospital Gazette, St. Bartholomew's Hospital Journal, The Serpent (Manchester), St. George's Hospital Gaeztte, Medical Journal of South Africa, Medical Review, Dental Record, Indian Medical Gazette, The Sphinx (Liverpool), The Northerner (Armstrong College), Adelaide Medical Students' Society Review, Abstracts of Bacteriology, New York State Journal of Medicine, London Hospital Gaeztte, King's College Hospital Gazette.

A Case of Chronic Diarrhœa.

Mrs. P., æt. 50, married, two children. She has had chronic diarrhœa for the past ten years. The attacks come on suddenly, by feeling "a rush" on the right side of the abdomen, she then has to be very quick or there is an accident. There is no alternating constipation, the bowels always being very loose. I sent her into Guy's about four years ago; there was no mucous colitis, but she had bad teeth and advanced pyorrhœa, so had her teeth extracted. On returning home she was no better and has latterly become worse and has got emaciated. For years she has observed a strict diet, any departure from which aggravated the symptoms.

At the beginning of November I sent her up for a full X-ray examination at the Croydon Hospital. I received the following report from Dr. Hernaman-Johnson: "This patient has a 'sagging' colon, the hepatic flexure being below the iliac crest and the middle of the transverse portion appears to be tied into the true pelvis. There is extraordinary spasticity which looks like diverticulitis and may indeed be accompanied by this trouble. Conclusions: Colonic ptosis, adhesions, catarrh, spasm, possible diverticulitis."

After the X-ray examination she came to me complaining of constipation (which she had not had for many years). I put her on the following mixture:—

℞ Tr. Rhei. Co. ʒiii.
Mag. Emuls. ℥iss.
Ag. Chloroform, ad. ʒvi.
℥ss. t.d.s., ex aq., p.c.

She has had in all three bottles of this mixture and the bowels have acted regularly once a day, with a soft, formed motion. She is looking better and putting on weight. I have advised her gradually to add meat and mashed potato to her diet and later shall add other articles as she improves.

A. P. A.

A Close Shave.

On May 27th, 1922, a man, aged 23, was "rope running" in front of a crane moving on railway metals. While he was engaged in hooking a truck on to the crane, the truck came forward and nipped his head sideways, between the buffer of the crane and the truck. The driver of the crane, seeing the man's danger, jammed on his brakes.

He was brought to my surgery with some abrasions of the ear and there was a well marked circular patch on the cheek showing where the buffer had nipped his head. His head was so firmly nipped that some difficulty was found, and the crane had to be backed, in releasing him.

On June 2nd he complained of a circular patch of numbness round the left ear and some pain on opening his jaw. The angle of the jaw was tender to touch and he had some headache.

On June 23rd he was quite well.

During the war we all heard of marvellous escapes, but I think this wants a lot of beating. The crane was moving at quite a fair speed and I reckon another half-inch would have meant an inquest.

S. G. F.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Alterations in the Rules of the Guy's Hospital Clubs' Union.

DEAR SIR,—I am instructed by the Club's Union Council to inform you that, at their next Meeting, the Council will consider a proposal to amend Rule 8, page 15, Clubs' Union Year Book, to read as follows:—"The Treasurer shall prepare a yearly balance sheet of the accounts of the Union up to the 31st of August, which shall be duly audited and presented to the Council in the month of October in each year." The alterations are as follows:—(1) the substitution of "31st August" for "31st March," the omission of the word "outgoing," and the substitution of "October" for "May."

The Council will also consider, at its next Meeting, a proposal to alter Rule 23, page 18, Clubs' Union Year Book, to read as follows:—"No alteration of, or addition to, these rules shall be valid unless it be confirmed at a subsequent meeting of the Council by a majority consisting of *six* members. Of such proposed alteration or addition, the Secretary, at least fourteen days before the meeting of the Council at which it is to be confirmed, shall give notice in writing to the Secretary of each of the constituent Institutions, and shall post a notice

in the rooms of the Student's Club and shall cause a notice to be inserted in the "GUY'S HOSPITAL GAZETTE.' The alteration, underlined, affects the number required to form a quorum on the Council.

Should there be any objection to these proposed alterations, Secretaries of Constituent Institutions are requested to forward same to the undersigned, on or before Friday, December 21st, 1923.—I am, Yours faithfully,

N. L. LLOYD,
Hon. Sec.
Guy's Hospital Clubs' Union Council.

Medical School,
Guy's Hospital, S.E.1.
December 5th, 1923.

Medical Unit: University of London O.T.C.

DEAR SIR,—May we, through the columns of the GAZETTE, draw the attention of members of the Hospital to the Guy's Section of the Medical Unit of the University of London O.T.C.? The section now has thirty members, but even so, we are still some way behind some of the other Hospitals.

No expenses are incurred by joining the Section; uniform (officers pattern) is issued free of charge and the camps cost the cadet nothing.

In order to be efficient a cadet must put in fifteen parades in the course of the year, and attend the Annual Camp for ten days.

Arrangements have also been made whereby cadets, who so wish, can have riding lessons at greatly reduced rates.

The parades are on Thursdays at 4.45 p.m., usually in Class Room II., and men may enrol at any of these.

We appeal to Guy's men to join the Section, so that in the O.T.C., as well as in other spheres of Hospital and University activity, Guy's may be "second to none."—We are, Yours very truly,

NORMAN BURGESS.
F. JAMES.
N. L. BARBER.

The College,
Guy's Hospital,
S.E.1.
30th November, 1923.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

The Collection of Overdue Fees and Accounts of the Medical and Dental Professions by the British Medical Protection Society.

The collection of debts due to both these professions is an entirely different proposition to that of collection from trade debtors, etc., for the following reasons:—

(1) The general impression current amongst members of the public that Doctors and Dentists do *not* sue for their fees.

(2) The necessity of both professions to employ courtesy and diplomacy, owing to the fact that they are both entirely dependent on recommendation for increasing their practice.

Having carefully studied (for a period of 32 years) the difficulties of the Medical and Dental professions in the collection of overdue fees, new methods have been gradually introduced during the last two or three years. In May, 1922, the Directorate was altered by the addition of Medical and Dental Representatives; at the same time the Advisory Committee was brought into being; the primary object of this Committee is to assist Members with their expert advice in connnection with disputed cases and at the same time to instil confidence into those who desire to take cases into Court, but feel that they may meet with hostile criticism from their brethren, unless strongly supported.

Both the aforementioned professions reap a benefit from the moral effect created by the Society (still further and greater results being anticipated when support is universal) as opposed to individual efforts through Solicitors or isolated Agents; this point is very clearly demonstrated by the good results we obtain (without legal process) after other Agencies have failed.

Many people who are able to pay only do so when pressure (of the right kind) is brought to bear on them from an outside source.

We have and are, still obtaining excellent results for provincial Members; this result is probably due to the moral effect created by a letter from a well known London society.

We have many methods of procedure; persuasion *without offence* being our *first*, and, if possible, only weapon; but in the event of non-success we adopt other measures, and, *if* Members *desire* it, the aid of the Law is invoked, but only after one of the outdoor Representatives has reported that it is a fair speculation to sue.

Debts are collected by instalments if necessary; this naturally increases the cost of collection because

it requires an elaborate system of card indexing and records to enable us to keep the payments up to date, but any method or system is better than proceedings in a Court of Law.

Every debtor is entered upon a Card and all valuable information is recorded thereon, so that when operations are complete, it is filed in a permanent cabinet for future reference.

Special attention is paid to the tracing of debtors who have gone away.

F. R. WATSON, Secretary,
The British Medical Protection Society.

Guy's Hospital Swimming Club.

The Annual Dinner of the Swimming Club was held at Maxim's, on November 28th. Sir Alfred Fripp, the President, was in the chair, supported by Messrs. R. Thompson, Philip Turner, P. Seymour-Price and T. B. Johnston. After the King, Mr. R. Thompson, in a humorous address, proposed the Club, and said that he was glad to see that it was in such a flourishing position. Mr. John Simons replied, and gave an account of the Club's activities during the past season. Five Cups were won. The Inter-Hospital Water Polo, Diving and Swimming, and the University of London Water Polo and Swimming.

Mr. C. A. Wakeford proposed the health of the President and Vice-Presidents, and referred to the founding of the Club by the Chairman. Sir Alfred Fripp replied, and said that he was pleased to say that Lord Desborough had consented to become a Vice-President of the Club and congratulated the Team on their success.

Dr. P. Seymour-Price proposed the toast of the Hospital and Prof. T. B. Johnston replied.

Mr. Philip Turner proposed the Visitors, and Mr. N. Kendall the toast of the Ladies.

Mr. S. V. Strong gave an excellent impersonation of a member of the Staff, and sat down, somewhat hurriedly, amidst loud applause.

Mr. J. D. S. Thomas concluded the speeches with a rather incoherent account of diving.

Prof. T. B. Johnston added to the success of the evening with an excellent song, followed by Mr. Pat O'Meara with a rousing chant of the sea—probably acquired from the foc'cle. Mr. "Blood" Richards also contributed to the musical programme, and Mr. "Fatty" Marsh gave his famous imitation of a palm-tree in full bloom.

After singing Auld Lang Syne, the company broke up, and crept away as silently as a procession of Ward Maids, and on inquiry next day there appeared to have been no casualties.

Hockey.

GUY'S v. THE NAVY (CHATHAM).

This match was played at Chatham on December 1st, and resulted in a good win for the Hospital by 4 goals to 1. Indeed, had the Hospital forwards availed themselves of the many chances offered in the Circle the margin would have been considerably greater. Our forwards—though playing one short—as usual, started off in great style, but owing to the slippery nature of the ground could not maintain the pace. About five minutes after the commencement of the game Catchpole, following up quickly, opened the scoring with a good shot which completely beat the goalkeeper. The Hospital continued to attack, Hunt, well served by Willett at right half, being prominent on the wing, and sending across several good centres which went begging. The former player narrowly missed scoring on two occasions. However, the Navy defenders had an anxious time and Catchpole netted two further goals before half-time.

Immediately after the bully-off, after change of ends, the Guy's forwards invaded the Circle, the ball going from Hunt, Schollum to Catchpole, who sent in a hard shot. The Hospital narrowly missed further goals by Catchpole, Swiss and Schollum. About halfway through this spell the Naval men pulled together much better, and their forwards attacked in fine mannner, but could not penetrate our defence, though Smith, in goal, effected two brilliant saves. Shortly before the call of time the Navy scored from a scramble in front of goal.

The absence of an inside left in the forward line rather upset our attack, and under the circumstances the forwards are to be congratulated upon the way in which they controlled the ball. The honours of the day rested with Catchpole who scored all our goals. This player is rapidly improving, is quick on the ball and follows through well. Swiss on the left wing, was not quite as good as usual. He should learn to use his stick with both hands and get rid of the ball quickly. He should do well later. Hunt, as usual, played a sterling game at right wing, being very deceptive and running well. It is a pity his centring is so frequently too far back. He had bad luck in not scoring on two or three occasions.

In this game the halves served the forwards much better, the passing being crisp and to some purpose. Willett, at right half, has the making of a first class player. He stops well, and feeds his wing assiduously. His chief fault at present is some slowness in clearing, a remark which applies as well to the stern defender, Lloyd. Kempe, at centre, made a good pivot, and had much work to do to hold

the Naval inside forwards. Awdry, at right back, again showed that he is a player of no mean ability. His attacking and clearances are indeed pretty to watch. His colleaque, Corybeare, good at times, is inclined to be very wild when in a tight corner. Smith in goal played one of his best games. His only fault at present is his slowness in getting back into goal after coming out to clear.

Guy's Team.—Smith, Awdry, Corybeare, Willett, Kempe, Lloyd, Hunt, Schollum (Capt.), Catchpole, Swiss.

The Hospital "Blue."

The following recommendations from the "Blues" Committee have been approved by the Council of the Clubs' Union.

1923.

FULL BLUES.

Football (Association).—T. Wooldridge, J. C. Hewetson, J. Gray.

Swimming.—C. A. Wakeford, J. Simons.

Tennis.—E. N. Sharpley, W. Badenhorst.

HALF BLUES.

Football (Association).—L. Pickett, H. N. Collier, J. N. O'Rafferty.

Swimming.—F. Bekker, L. Brown, W. F. C. Tucker, A. R. Marsh.

Tennis.—H. P. Yew, L. E. Owen, D. R. Grant.

Rifle.—J. R. Ford, T. E. Brown, J. A. R. Moore.

Golf.—F. W. Schofield, G. W. Gathergood.

Rowing.—A. S. Gough, C. K. Colwill, A. Tom, E. T. Clifton, K. O. Parsons, I. C. P. Beauchamp, K. S. Keele, F. C. Miller, W. A. Caldwell.

JOHN SIMONS.
Hon. Sec., Blues' Committee.

Rugby Football.

GUY'S v. LONDON WELSH.

The weather doesn't favour us at Herne Hill for our visits to the London Welsh. A very cold fog did its best to obscure a moderate view of the game and towards the end of the match, the fog practically succeeded. C. L. Steyn and W. Meissner were taking a rest; its a nasty business on a slippery ground to play with a weak leg muscle.

At the commencement Guy's rushed well to the home "25" and there we had a round of passing and some straight running by the centres. Then the Welshmen got a move on and we had to go back, all the rushes of the Welsh forwards were led by W. L. Michael. He is a heavy strong forward and no one exactly loves him, but he is a very useful man to have on one's side. S. R. Trick was a little shaky at first, but the assistance he received from P. D. B. Spence and E. E. Neser soon gave him confidence, and after that he did quite well.

The first half brought no score, we had the ball plenty of times to get a half dozen tries, it was the tackling that was too much for us. It was good to see Graham-Davies and P. D. B. Spence sticking to the "middle of the road" and thus give their wingmen room. Fellowes-Smith had a good run or two.

Very soon after commencing the second portion of the game, we assumed the upper hand. F. Bekker, like a good sportsman, was at scrum half and with Van Schalkwijk's help and some better heeling than usual our threequarters got going many times. Spence gave to Finnemore, and bravely as the wingman tried he could not pass his vis-a-vis; one thing I would beg of him; do not throw the ball, when tackled, anywhere, in the hope that someone may guide it to a Guy's man. More often the Director of Rugby Balls directs these S.O.S. passes to an opponent. Fellowes-Smith, the first to score, loomed up out of the fog from a short throw out and raced behind, no goal resulted. Next Spence got a Finnemore inside pass and scored wide by the flag. A magnificent kick by Neser goaling. The next thing was a score by Van Schalkwijk, and then Tregarthen took a full count of ten. He was groggy on resuming, which he did very pluckily. Why some gentle opponent should have knocked him out with one somewhere near the point will never be known. The end came with Graham-Davies gaining a try, and as no conversion followed Neser's great effort, our final score was Guy's 1 goal 3 tries (14 points) London Welsh nil.

Surely the best forward was E. H. Fouraker, but all appeared to do well when one could see them. F. F. Brayfield was not the least useful. One thought J. G. Van Schalkwijk again kicked too much, but one must leave that to him, one rather thinks he knows best, and remember he didn't put himself at "stand-off" after practically two years away from that position for the fun of the thing.

Guy's Team.—S. R. Trick, J. W. Finnemore, P. D. B. Spence, H. Graham-Davies, G. Fellowes-Smith, F. Bekker, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, B. G. Scholefield, E. H. Fouraker, G. G. T. Tregarthen, G. G. Cameron, J. W. Schabort, F. F. Brayfield.

GUY'S v. BLACKHEATH.

What a game it was at the Rectory Field on Saturday, December 1st, and what an anxious second half we all went through. Our forwards, if truth must

be told, were beaten constantly, pushed in the scrum, so that we practically never got the ball, then Graham-Davies getting damaged in making a laudable break through, compelled some re-arrangement, hence Neser came out of the scrum and this but accentuated our weakness.

We started in great style and got quite our share of the ball, there was attack and counter-attack and the ball was handled well and quickly. G. W. Harris was the star threequarter for Blackheath and he was played up to persistently, but soon Fellowes-Smith got him set and watched him very thoroughly. He never got far. Ten minutes from the start Meissner got Van Schalkwijk away and Graham-Davies, the next to handle, sent Steyn racing away to score a good try which Neser almost but not quite converted. From this time we rather fell away and Harris almost got through. Tying us up somewhat the ball was quickly passed to the other wing. Spence had to go for Hopkins, whose wingman was quite overlapping our defence, but luckily the ball was badly passed and we breathed again. Nothing more happened till ends were changed.

Less than five minutes had gone by, when W. P. Guthrie sent Row over, Harding missed the conversion and again we felt a weight removed. Alas! we were penned in our own "25." Manfully our forwards tried to ease the pressure. It was Graham-Davies who broke away at last. Then he was hurt and back to the "25" we went again. Most bravely did Meissner go down and the others tackle, but best of all was Spence. Seldom has a Guy's full back done so well. His tackling was a lesson. Van Schalkwijk kicked well and Neser was everywhere. Fouraker got laid out. At last relief came and Steyn had a shot at a drop goal. Hereabouts Scholefield, who had played another great game, and he has played many this season, got a nasty knock on the head. But he still played on and by intuition followed the ball like a Trojan, though very dazed. Soon we were back to our own territory, but the defence held and the game was left drawn, though one must confess we had had the worst of it—1 try each.

The forwards were out-scrummaged, we want more weight and more speed. Scholefield, Fouraker and Cameron one saw and the others worked hard, but were not very prominent; theirs was a great strain. Meissner did his utmost behind a hard pushed pack and the backs had little opportunity; their defence was much better, but we owe much to Spence and Fellowes-Smith. Steyn tackled alright, but he did not go down. Steyn is a better wing than centre. Fellows-Smith used to play inside and on Saturday he proved he could go down and for his man as well. Graham-Davies and Finnemore with the Captain, as stated above aided well in holding the Fort.

Guy's Team.—P. D. B. Spence, G. Fellowes-Smith, H. Graham-Davies, C. L. Steyn, J. W. Finnemore, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, N. M. Holloway, B. G. Scholefield, G. G. T. Tregarthen, F. W. Bekker, G. G. Cameron, E. H. Fouraker, F. F. Brayfield.

G. E. Kidman, the old Guy's forward, is busy Rugby Pioneering in Derby. Good luck to him.

Blackheath had in their team last Saturday, J. H. Bordass of Cambridge, A. W. L. Row, Bart.'s, and H. N. Knox of King's and so on. Their forwards were nearly always offside, but never mind we drew and you cannot always referee from the Grandstand.

Congratulations to W. D. Doherty on becoming F.R.C.S. England. Another good Rugby man has done the same thing, L. G. Brown of the London Hospital.

B. G. Scholefield has been chosen to play in the next International Trial. Splendid. May he add yet another Cap to those collected by Guy's men. His recent displays deserve it.

Association.

GUY'S v. ROYAL VETERINARY COLLEGE.

(2nd Round of University of London Cup.)

Played at Honor Oak Park.

Owing to the late arrival of our opponents only 35 minutes was played each way.

From the kick off the Royal Vets. were prominent and their centre half almost scored from a free kick taken just outside the penalty area. Guy's rallied and were soon a goal up, Walters making a fine solo effort from his own half and scoring. This was soon followed by goals obtained by Couch and Pickett. The College had a fair share of the play but their inside forwards were unable to finish off their efforts.

After half-time the play became scrappy and lackadaisical and Guy's scored twice more through Williams and Pickett to one goal by the Veterinary College. Result 5—1.

GUY'S v. CASUALS "A."

Played at Malden on November 24th.

This game was played under unfavourable conditions and long before the end the light was too bad to recognise the players except at close quarters.

At the commencement of the game the Casuals were prominent and a good goal was scored by their centre forward.

The Guy's goal was the venue of the play for the first ten minutes of the game and the Casuals scored again. From this stage on the Guy's team got into their stride and play was of a more even nature.

Twenty minutes from the start Couch scored; and a second goal followed in quick time. Walters received the ball on the wing, cut into the centre and scored a fine goal from a difficult angle. Just before half-time one of our opponents was unfortunate in kicking the ball through his own goal.

The second half was inclined to be scrappy and vigorous, but this can be attributed to the failing light. Williams scored late in the half from a centre by Walters.

The game was evenly contested and play throughout was of a keen and fast nature. The result does not truly represent the run of the play, although undoubtedly we had more of the play than did the Casuals. The team as a whole played well.

Guy's Team.—Hardy; Riddolls, Manners; Gray, Boyd, Hewetson; Walters, Pickett, Williams, Couch, Plowright.

The record of the Association Football Club up-to date is a very fine one. 14 matches have been played; 10 won, 2 lost, 2 drawn: goals for 52, goals against 23.

The team drew a bye in the First Round of the University Cup, and in the Second Round they defeated the Royal Veterinary College 5—1.

The strength of the team lies in the goal scoring abilities of the forwards; the defence is very fair, but is inclined to be uncertain at times; a defect which must be got rid of before the important Cup Ties after Christmas.

The best performance was when the team drew 4—4 with H.A.C. after being 3 goals down after a quarter-of-an-hour's play.

Reviews.

The Nursing of Infectious Diseases. By F. J. Woollacott. 3rd Edition. 4s.

This is a valuable little book and well worth studying. Infectious diseases, their treatment and complications are well described and the nursing duties emphasised.

Page 13 explains cubicle and barrier nursing, and page 54 gives an account of the new Schick test for susceptibility to diphtheria, thereby adding to the value of the book.

There are also chapters dealing with tuberculosis and venereal diseases, which are most helpful.

SPECIALITIES.

Barclay's Light London Lager.

MESSRS. BARCLAY, PERKINS & CO., LTD., The Brewery, Park Street, S.E.1.

Messrs. Barclay, who have a far-famed and well-deserved reputation for Ales and Stout, brewed with great care in an up-to-date plant under the best conditions, have put upon the market a Light Lager Beer, which is a most palatable and wholesome beverage and can be highly recommended. Its nutritive qualities are very satisfactory and samples have been fully analysed by the Clinical Research Association, Ltd., with the following results:—

Alcohol, by weight	3·22%
Equal to Proof Spirit	7·05%
Extract	5·97%
Proteins	0·38%
Sugar	1·38%
Fixed acidity (as Tartaric acid) ...	0·056%
Volatile acidity (as Acetic acid) ...	0·017%
Mineral Matter	0·19%

The Analytical report also states that Barclay's Light London Lager is "well brewed and of particularly low acidity."

The *Lancet* gives an equally good report and assures Medical men that they may have every confidence in recommending these Beers as being fully fermented and matured.

THE MEDICAL SICKNESS, ANNUITY And LIFE ASSURANCE SOCIETY, LTD., 300, High Holborn, W.C.1.

The Medical Sickness, Annuity and Life Assurance Society, Ltd., is run for Doctors and Dentists only, by Members of the two Professions.

It has a special scheme for the benefit of those just through or about to pass their Finals, particulars of which are given in our advertisement columns.

We recommend those interested to write for fullest particulars to the Assurance Society mentioned above.

Change of Address.

W. C. Cunningham, Staffa, Selsey, Sussex.

H. W. Pigeon, Ebor Lodge, Felbridge, East Grinstead.

H. W. Collier, Fairwood, Knockholt, Kent. Telephone 43 Knockholt. London address unaltered.

M. D. Price, Mongonui, North Auckland, New Zealand.

ED.—C. H. C. T.

GUY'S HOSPITAL GAZETTE.

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Passim.

IF every one of the ten thousand other reasons were lacking, Christmastide would still justify its adjective of "merry" to the Editor of a Hospital Gazette. It is the one season of the year when he can sit down merrily to his "Passim," and write "A Merrie Christmas to you all, dear readers," knowing that his remarks for once will not be challenged and that he will close another volume of his journal in peace, with goodwill towards all man-kind. That is how we feel about it. We have been responsible for many statements and opinions during the year and a large number have been either censored before publication or censured afterwards, but for this one number we feel constrained to write nothing that could hurt the most sensitive or that could give excuse to the most skilled controversialist.

For Christmas is the summit of perfection of each year, the season when youth is regained, sorrows scorned, extravagances indulged and dull care flouted and forgotten. It is the end of the year for which the rest was made and it is more than probable that during the millennium the rest will be abolished and one Christmas will follow directly upon the heels of another. In other words we shall enjoy perfect and continuous happiness. It is a continual puzzle to us how there can be any unhappy people at this time of the year. None is so poor or friendless that he does not receive at least one wish for a happy Christmas, no Scrooge is so misanthropic that someone does not call through his letter-box to wish him a happy week's misanthropy, while the people, who attend Churches, pray for happiness, sing for happiness, and even occasionally go out and try to promote happiness. There is in fact an irresistible impulse towards happiness which does credit to the Christian race and justifies their existence. For what other reasons are there for being alive at all. Rightly the whole year should be one long Christmas and the Christmas spirit should exist throughout life. The physiological explanation of life and death is but a poor one and infinitely inferior to the psychological difference between these two states. We hear so much from all sides of the life after death, but rarely if ever do we read of the death during life. For the live human beings are the happy ones, the miserable ones are the dead; dead to all that makes life worth living; buried deep in the mould of their own petty miseries. To capture and retain the Christmas spirit should be not only a joy and

an inestimable privilege, but a first principle of the Christian religion. It is as immoral to be unhappy as it is to commit suicide.

To gain this enviable state while enjoying the benefits of our modern civilisation is not easy. Hedonism is not the doctrine of happiness and sybarites are not its disciples. It is as true as it is trite that it takes all kinds to make a world, and it seems to us that the chief advantage of having so many people in the world is that one can avoid all the grumpy ones and still have plenty left to play with. Play is the supreme sign of the Christmas Spirit, just as children are its chief acolytes. They, of all others, have retained the capacity for pure enjoyment and so through sheer force of circumstances Christmas has become the children's season. Nowhere is this more apparent than at our own Hospital. The Christmas Trees, the parties and even the decorations would lose their greatest charm if there were no children to enjoy them, while the Niggers would be insupportable, were they not so delightfully childish.

It is the happiness of childhood, unspoiled, elemental and complete, that we wish for all our readers this Christmas and may it last right on through the New Year. To those, who will be spending it at the Hospital the wish is almost unnecessary. Every day next week the wards will be scenes of parties and concerts, while on Tuesday each will witness the obsequies of an enormous turkey. A ward Christmas dinner is a banquet that no one should intentionally miss. It is as sustaining as it is jovial. After it one is equal to anything, even to listening to the Niggers, while some have even been known to follow these noisy and peripatetic minstrels for hours during the afternoon. Those who feel specially fortified should force their way into the Out-Patients' Department, where the children's party will already be well under weigh. The children here are thoroughly independent; they need very little entertaining. From Timbuctoo to Tonypandy, the joy of living finds an outlet in song, and the Borough has no nasty original substitute for this primitive emotional display. On Tuesday seven hundred children will proclaim to the world at large that "Yes, they have no bananas," and will obliterate any sounds that struggle for a hearing from the orchestra or niggers.

To all those, who are still following their pre-clinical studies, whatever may be their chances of overtaking them, we can assure a very hearty welcome in any of the wards during next week. Each ward keeps open house, especially on the day of its concert, until the season comes to an end with the "New Year's Eve," concert in "Astley-Cooper" on Saturday. That should on no account be missed.

A Happy Christmas to you all.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The following letter has been received re the late Claude Tessier :—

The Dean,
Guy's Hospital, S.E.

DEAR SIR,—I am informed by the executors of my late brother, Mr. Frederick Tessier, that you are placing a plate over the bed which he endowed at your hospital in memory of my son, Claude. It occurs to me that, in the large number of students passing through, you may have forgotten that my son was a student, that he was a winner of many prizes, that he took his M.D. at London University and held the appointment of House Physician at the hospital. He was drowned, together with a daughter of mine, whilst bathing off Beachy Head in 1915.—I am, dear Sir, yours faithfully,

ARTHUR C. TESSIER.

December 7th, 1923.

Tetanus and Trismus Neonatorum.

By H. C. CAMERON, M.D.

How many cases of so called tetanus neonatorum are in reality due to the tetanus bacillus? I suspect a few only. The question is of real importance because of the appalling mortality from the disease in India.

Formerly in this country new-born infants died in great numbers from a disease, characterised especially by trismus, which was called sometimes "the eight days sickness," and sometimes "the nine days fits." Colles, at the beginning of the last century (Dub. Hos. Reports, Vol. 1) was apparently the first to identify the disorder with traumatic tetanus and to find the focus of infection in an "unhealthy or unkindly form of inflammation or ulceration" at the navel. But to Colles the word tetanus meant spasm and no more.

In the 25 years ending in 1782, of 17,650 infants born in the Rotunda Hospital in Dublin, 2,944 died of trismus. Following improvements in ventilation and in hygiene introduced by Clarke (Trans. R. Irish Acad., Vol. III.) the number fell rapidly from 17 per cent. in the above figures to 2 per cent. between 1826 and 1833. The decline elsewhere in these islands seems to have been steady, if, especially in rural Scotland, more gradual, until by the second half of the last century, like belief in witchcraft or the evil eye, it lingered only among the most remote and primitive communities. The story of St. Kilda is known to all. In 1860, of 125 children born to the fourteen married couples in the Island 80 had lost their lives within 14 days, nearly all of lock-jaw. Up to 1890 the scourge was unabated, when it ceased under the ministrations of Nurse Chisnall, a Gaelic speaking nurse, who consented to be marooned on the island, taking with her a plan of action worked out by Dr. W. L. Reid, of Glasgow, a knowledge of the importance of cleanliness and large quantities of iodoform for the cord. (Turner, Glasgow Med. Journ., No. 111, March, 1895.)

Elsewhere on the edge of civilisation the disease continued its ravages, especially among the black population in the West Indies and in the Southern States of America, in the Balkans and in India. In parts of India it is still to-day appallingly common. In the United Provinces of Agra and Oude the Annual Reports of the Sanitary Commissioner show that in 1916 there were 116,000 deaths of newly-born infants returned as due to tetanus, about half of the total infant mortality for the first year of life, which varies in different years between 20 and 30 per cent. In the district of Basti of 12,929 deaths, 10,855 were reported as due to tetanus, figures which the Commissioner states are not compatible with a correct diagnosis. In the following years instructions were issued to medical officers to scrutinise carefully the returns made of death from tetanus, and to "verify the diagnosis." This does not seem to have meant that any bacteriological proof or post-mortem investigation was attempted—such procedures presumably are not possible in the conditions present, but rather that the circumstances of these deaths were inquired into. As the result of this supervision the returns fell in later years in some districts by about 20 per cent.

A mortality so vast and so persistent among any population so long as it is ignorant of precautions against sepsis and so easily controlled by the introduction of such precautions seems more likely to be the direct result of septic infection of the new born than to indicate that the accidental contamination of the umbilical wound with the tetanus bacillus has occurred in each case.

Certainly there are on record a few, a very few, instances in which the bacillus has been found in individual cases of tetanus neonatorum,[1] and in a very few cases[2] injection of scrapings from the umbilical cicatrix into mice has produced tetanus. In general, however, the bacteriological evidence of the presence of the tetanus bacillus is wanting, and injection into animals has only been carried out in a few instances.

That the clinical symptoms regarded as characteristic of tetanus may be produced by other infections of the cerebro-spinal system is undoubted. Batty Shaw (Brit. Med. Jour., February 3rd, 1923, p. 183) publishes a case of streptococcal meningitis which during life was thought to be tetanus.

"It is clear," he says, "that meningitis may provoke spasm of the facial muscles producing risus sardonicus, of the muscles of the neck and of the abdominal wall, that the spasm may be constant lasting for hours or even days, and that the spasm may be increased by irritation such as is produced by nasal

[1] By Kitisato in a case of Baginskis.

[1] By Kitisato in a case of Baginski's.

feeding, etc., the patient remaining conscious throughout the illness. Such features have been held in the past to constitute a clinical picture of undoubted tetanus. This view must be abandoned. It appears to us that no reliance can be placed upon an exclusive clinical picture of tetanus because the disease may be accurately imitated by meningitis."

It is stated that a search in the accounts of text-books produced only one reference to the possibility of confusion (Allbutt and Rolleston, Vol. 8).

Even in the case of adults and older children, however, I do not think that the simulation of tetanus by meningitis or encephalitis is as rare as Dr. Batty Shaw implies. I can myself recall at least two cases of meningitis in which a diagnosis of tetanus had been made. The possibility of confusion was certainly well known to an older generation, and as I should have expected, is referred to in "Fagge and Pye-Smith" in two separate places. (Fagge and Pye-Smith, 3rd Ed., Vol. I., p. 655 and p. 724). At a still earlier date the records of post-mortem examinations carried out upon cases which were regarded as tetanus include many in which evidence of meningitis is described. Hall (Edinburgh Med. Journ., Vol. 15) confidently describes inflammatory appearances in cord and brain as characteristic of "tetanus." T. Lewis Smith (Arch. Pædiatrics, Vol. XI., 1896) after a minute survey of the literature says, "In examining the literature of tetanus it is evident that the tonic contraction of the muscles in certain cases which has been supposed to indicate the presence of tetanus, has been due to spinal or cerebro-spinal meningitis."

But when we leave the consideration of adults and older children[3] and deal with the newly born, we are all of us familiar with the high degree of rigidity of the muscles which may and commonly does accompany sepsis neonatorum. If it is true that the classical pictures of advanced diseases are becoming more and more rare in general medicine, it is still more true of the diseases of the newly-born. The provision of aseptic childbed, if it was a work achieved originally in the interest of the mother, has indirectly conferred a great benefit upon the child. The picture of sepsis neonatorum as we encounter it, for example in the pages of Trousseau, has been banished.

"Of 193 infants born alive 50 died of the very same affections which proved fatal to the lying-in women. The most frequent causes of death were peritonitis, numerous abscesses, purulent infection, phlegmonous swellings, erysipelas, gangrene of the limbs, putrid infection, or some other remarkable septic condition. The mother and child often had the same disease, but sometimes its form and seat were, and at other times were not, the same in both; for example a child sometimes died of peritonitis and its mother of purulent infection or the child of purulent infection and the mother of peritonitis. . . . The infants of fifty women who recovered after having had puerperal symptoms died of peritonitis." (Trousseau's Clinical Medicine, p. 367. New Sydenham Soc., Vol. II.)

To-day in this country we still encounter sepsis neonatorum, but almost always in a form infinately less severe and often with symptoms so obscure as to make description and identification a matter of great difficulty. In addition to various septic skin disorders, pemphigus neonatorum and exfoliative dermatitis, we find cases in which the manifestations are predominantly in gastro-intestinal tract, such as foul-smelling diarrhœa, jaundice, or gastro-intestinal hæmorrhage, and cases in which the respiratory tract especially suffers. In most of these there will be found evidence of some rigidity of muscles. The face is apt to be stiff and lined, the limbs are hypertonic and the hands are pronated and clenched with the thumbs adducted. Sucking is almost always difficult and the movements of the jaw are stiff and ineffective. But in addition there are very many cases in which the symptoms are confined or almost confined to the cerebro-spinal system, consisting of restlessness or partial coma, convulsions, twitching of muscles, rigidity of limbs, pronation of hands with the thumbs rigidly adducted, opisthotonos, and finally trismus. It is this group which especially appears to me to mimic tetanus more or less closely.

I have in the last few years had the opportunity of studying five such cases of varying degrees of severity. All were admitted to hospital at an age of less than 3 weeks. Four recovered

[3]Apart from this neonatal trismus, the immunity of young children from tetanus is noteworthy. "During the first five years of life (the first month excepted) there is almost complete immunity from tetanus." "The disease is practically unknown under five years."—Gowers. *Dis. Nerv. System*, Vol. ii., p. 675 and p. 680.

one died. Two had exfoliative dermatitis of a mild sort, one had a septic umbilicus, one had a large sloughing ulcer on the palate (Bednar's Aphtha) in the fifth no focus of infection was obvious, but the mother was admitted to hospital with puerperal symptoms. In the mildest degree the symptoms were confined to the typical rigidity of hands and limbs and to a characteristic expression of face due to the stiffness of the facial muscles. The photograph (1) shows well the startled or haunted look which catches the eye. In this case suction was very difficult for some days, but was not altogether prevented. The mouth could be opened to a less wide extent than normal. Improvement gradually took place, the spasm of the hands continuing longest. At the end of a fortnight it was no longer apparent. Photograph 2 shows the condition in another child in which the severity was much greater, so that the simulation of tetanus was complete. Here we have the complete picture of risus sardonicus. Death took place a fortnight later from gastro-intestinal disturbance at a time when the spasm had to a great extent yielded. Post-mortem examination showed great congestion of cord and meninges, but no macroscopic evidence of meningitis. The histological examination has not yet been made. The study of the cerebro-spinal fluid, however, removed during life afforded good evidence of cerebro-spinal infection or irritation. The cells numbered 250 per cc. and the protein content was raised to ·12 per cent., six times the normal.

Two of the remainig three cases may be perhaps best described as intermediate in severity between these two. In both of them it was noticeable that the trismus, as it was the last to appear, was the first to yield as recovery took place. The spasm of the extremities lasted much longer.

The last case was of interest because it offered a contrast with the usual symptoms of tetanus. The jaw was fixed with the mouth open, not shut. (Photograph 3.) The spasm here affected not the masseters but the temporal muscles. This was a severe case. The jaw remained rigidly fixed in the open position for some weeks, the violent spasm of the hands and feet lasted for months. Indeed it gave rise to a persistent deformity of the fingers. As we watched there gradually developed a peculiar shortening of the tissues on the flexor surfaces of the clenched fingers so that ultimately, after all spasm had ceased, there remained an inability to extend the fingers because of this shortening. (Photograph 4.)

Examination of the cerebro-spinal fluid in this fifth case showed an increase of protein to ·05 per cent. The cells numbered 5 per cc. A similar result was obtained in one other; in the remaining two, lumbar puncture unfortunately was not performed, or failed, at the height of the disturbance.

I believe that in these five infants from poor homes in the south of London, I am watching the degenerate descendant of the awful trismus nascentium or eight days sickness, which formerly was rife in this country, which survived until recently in St. Kilda, which persists to-day among the negroes of the West Indies and the United States, although in vastly diminished amount, but which appears to retain all its virulence and all its frequency among the natives of India, attracting no more attention than an occasional official comment in a statistical survey of the causes of infantile mortality.

For the reasons given I believe that it is likely that the disease is a direct result of sepsis with involvement of the cerebro-spinal system, either in a serous meningitis or in some other way, and not an indirect result of sepsis by contaminatiion with the tetanus bacillus. The question at least seems worthy of investigation in India where the disease is rife. In this country opportunity for a full investigation on a large scale will now seldom occur.

For an account of post-mortem examinations carried out at a time when the disease was still common, and before its identification with tetanus had discouraged investigations into its nature, I may refer to an article by Hartigan, American Journ. of Medical Sciences, January, 1884, p. 111, published a month or two before the discovery of the Tetanus Bacillus. From the description of the older observers in all countries, one point only emerges, that the cord and meninges were extremely vascular. In many there were "extravasation of blood" or "dense deposits of fibrin," or "extravasation of lymph." Hartigan, besides analysing the results of previous post-mortem records, himself conducted 23 post-mortem in most of which extravasation of blood-stained lymph was found around the spinal cord. He gives a micro-photograph of the histological appearances,

showing organising lymph around the cord. That same year the tetanus bacillus was discovered by Nicolaier. Since then it has been tacitly assumed that trismus and tetanus are identical. This assumption and the increasing rarity of the disease has made the literature of recent years very scanty.

In our own post-mortem records at Guy's I can find notes of only two autopsies upon so-called tetanus neonatorum. In one the notes and apparently the examination are too scanty to be of any value. The other was fully recorded by Professor Laidlaw, and it is significant that the child died with infective endocarditis on the tenth day of life with numerous vegetations on the valves of the heart. The umbilicus was unhealthy. The condition of the cord is not noted.

Alcohol in Relation to the Race.

A paper read before the Guy's Hospital Physiological Society by Mr. R. C. Brock.

Mr. Chairman and Gentlemen—

It is rather fortunate, in one way, that this paper was due to be read to-day, for, if you remember at the discussion on Heredity in Relation to Eugenics a fortnight ago the subject of Alcoholism was one that was left alone. I think the chief reason why nothing outstanding was said was because when people come to examine their state of knowledge on the subject they find to their surprise it is strangely lacking, and if they are reasonably honest they will say nothing. Unfortunately, this is not always the case, and Karl Pearson is quite right when he says, "The intellect of man can be affected by intoxicants more subtle than alcohol, and the most dangerous of these is the passion for collecting, without weighing, any statements which will support a prejudgement."

Sir Clifford Allbutt simply reiterates many other opinions when he says, "Much of the literature of alcoholism is of a rhetorical rather than scientific order, and the sooner order and method are introduced the better."

The whole subject is complex, and it is not possible in this paper to give any decided opinions. I will try to give you the various views and let you attempt to fit them together in discussion. That this is the opinion of almost all who inquire into the subject is shown by the fact that the Medico-Sociological Section of the B.M.A. in August last, after a long meeting requested the B.M.A., "To assist in the promotion of further inquiry into the effects of alcohol on the individual and the community."

My first interest was aroused by alcohol in relation to heredity, and I will deal with this first. I shall mention much work on the subject only to reject it, but you will see this is necessary both to give an idea of what has been tried with no results, and how bad conclusions have been drawn. I would like to have given a fairly full account of the chief work, but I found the time makes this impossible and where I appear to be superficial it is because of this, and if any fuller description is needed I shall be only too pleased to give it.

Prof. Hodge took two dogs and gave them alcohol with their food. Of 24 puppies that were born many were deformed and dead. Then three perfectly formed, but still-born puppies were born and the mother died during partuition. The uterus showed *fatty degeneration*. A control gave 45 puppies, of which 41 were normal and very vigorous, three had hare-lips.

This experiment is obviously gross in the extreme. That the effects were very far reaching is shown by the death of the mother during parturition. But in any case nothing is proved for as the fœtus was able to receive the direct effect of alcohol in the mother's blood there is no question of heredity.

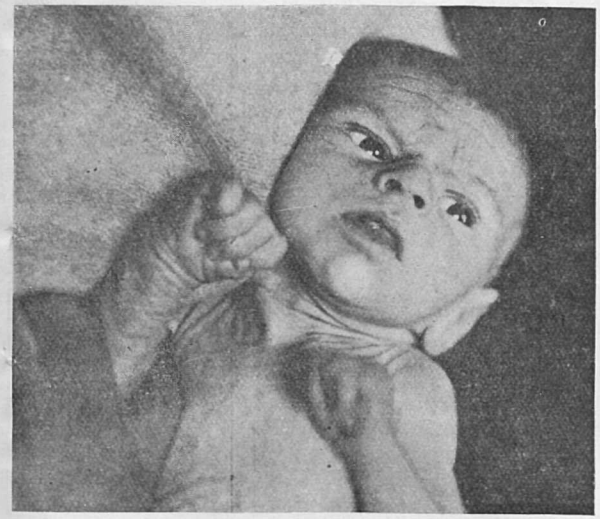
If small amounts of alcohol are added to sea water in which sperms of starfish are placed the vitality of the sperms is not diminished and eggs fertilised by them develop rather better than the controls.

Sperms of rat, sheep, dog, rabbit, and guinea-pig have been treated with alcohol up to 7 per cent. (*1/10th of this in the blood stream would almost* certainly be fatal). Females artificially impregnated with these brought forth a normal and vigorous progeny. It is perfectly justifiable to assume from this that the *mature*, the *mature* spermatozoa at any rate, are quite resistant. We might compare this with the harrowing tales of havoc produced in human offspring by paternal drunkenness at the time of conception. The sperms, already isolated from any organic connection with the rest of the body, and relatively resistant would probably be less affected than at any previous time.

Similar experiments with sperms of fishes showed they were relatively uninjured up to strengths which were well-nigh fatal to them. It was only with a strength just precise that they could be injured so that eggs fertilised by them developed abnormally.

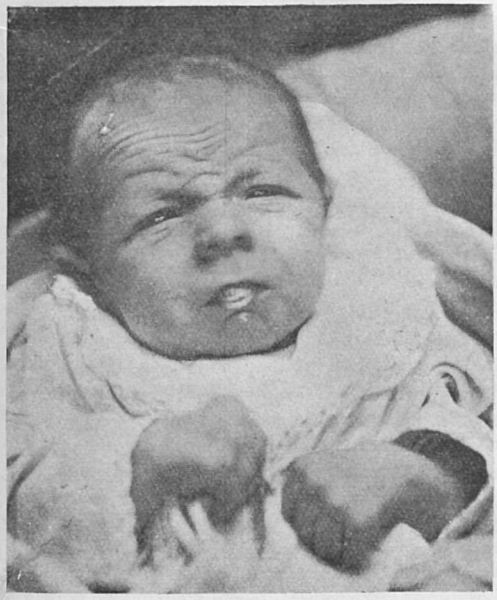
The soundest work has been done by Stockard on guinea-pigs and Pearl on fowls, and I give as full a description as possible in the space.

Stockard first worked on eggs of fishes and only used alcohol as a convenient substance in investiga-

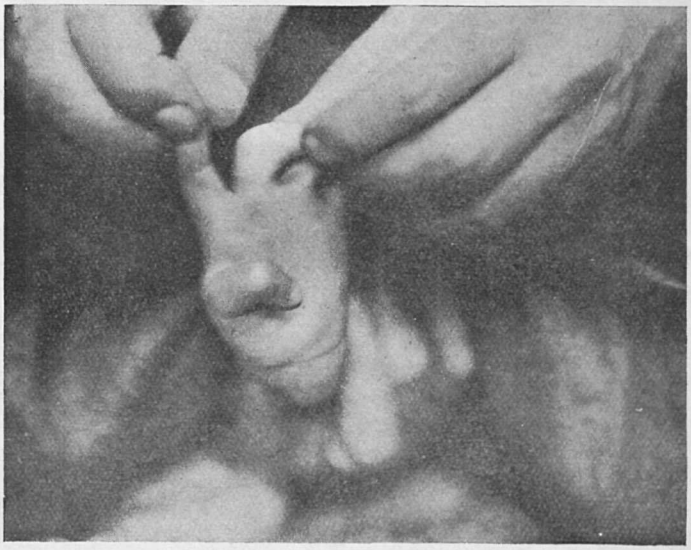


1. A mild case showing spasm of extremities, rigidity of the facial musculature, and some degree of trismus.

3. An anomalous case in which the jaw was rigidly fixed in the open position with extreme spasm of the extremities.



2. A severe case showing complete closure of the jaw with "risus sardonicus," and spasm of the extremities.



4. The hand of case 3, photographed six months later, showing the persisting deformity of the fingers. The middle finger is being extended to the utmost of which it is capable.

Illustrating Dr. H. C. Cameron's Article on "Tetanus and Trismus Neonatorum."

ting embryological developments and changes caused by different environment. All his results on the lower eggs were not peculiar to alcohol and could be obtained by other conditions, physical or chemical. He remarks that if 100 eggs of fundulus are exposed to alcohol some develop quite normally as if they had resisted treatment, some are slightly affected, some more so, and some are killed. There is clearly a selection. The eggs which would develop into weaker fishes being killed. This also occurs if a sublethal dose of any substance is added and is in no way peculiar to alcohol. Even NaCl, sugar, and many other substances used in food will have the same effect.

From this he went on to mammals and his work is very careful and exacting. He has been doing it now for over 12 years, and has records covering thousands of guinea pigs. Only animals of well-known pedigree stock were used and the controls were brothers and sisters of the treated animals. There was no inbreeding at all, and any differences between the controls and treated animals must have been due to the alcohol as that was the only difference in the two conditions. The animals were given alcohol six days out of seven by inhalation until they showed distinct signs of intoxication, but were never completely intoxicated. You will all agree that this was pretty severe. I want you to notice the alcohol was inhaled.

I am giving nothing but the bare results.

The pigs were first mated to show they were capable of normal issue and then treated females were mated with normal males. The result on the offspring was very bad, but clearly this did not exclude direct effects on the fœtus and so normal females and treated males were mated. The results were quite as bad and showed conclusively that in some way the sperms had been damaged. There were many deformities and the pre- and post-natal mortality was very much higher than in the normal This was verified by many matings of alcoholic females and normal males, normal females and alcoholic males, and alcoholic both, and more recent data from unrelated stock only confirms it.

The offspring from treated parents were now mated, and though they had *received no treatment themselves they produced a relatively defective progeny.* Deformities and defects occurred much more commonly in the alcoholic strains, e.g., paralysis agitans, opaque cornea, cataract and opaque lenses, small defective eyes, complete absence of one eye, and finally complete absence of both eyeballs. In some cases there were deformities of limbs, albinos and dwarf forms with low vitality. No defects were noted in the normal strain.

Normal females mated alternately with alcoholic and normal males verified the male could be the sole cause of this and it is difficult to see how this and the fact that the defects occurred through three generations even when no more alcohol had been administered, can be explained unless there is a definite injury to the germ-plasm.

During the next three generations the results were very enlightening, for what with the greater pre- and post-natal mortality of the alcoholic strain and the fact that the live offspring were often sterile and defective there was, by the fourth generation, a perfect proof of selection. The constant elimination of defective individuals through three generations and the matings with normal stock gave animals, derived from alcoholic great-great-grandparents, which were superior in their records to the normal stock.

Pearl's work on fowls is apparently directly opposed to these results. His method of administration was the same. The treated fowls weighed, on an average, less than the controls and had reduced vitality, but the mean egg production was the same. The proportion of fertile eggs was materially reduced in matings in which one or both individuals had been treated, and the higher the germ dosage index for the mating, the smaller was the percentage of fertile eggs found to be. The pre-natal mortality measured by the percentage of embryo (zygotes) which died before hatching to all embryos formed was materially smaller in the case of offspring of treated than non-treated parents. Most striking was that the mortality of all ages after hatching was lower in offspring of alcholic parents, and while the hatching weight was about the same the adult body weight was higher in the offspring of alcholics Abnormalities appeared no more frequently than in the controls. He concludes that "in view of the superior character of fowls from alcoholic parents there is no evidence that specific germinal changes were induced by the treatment; *at least so far as the cells which produced zygotes.*"

He admits alcohol probably injured some germ-cells as there was the higher percentage of infertile eggs when either parent was treated.

Neither Pearl nor Stockard consider their results are opposed, but attribute them to the different resisting powers of the bird and mammalian germ-cells. In other words individual injury and selection occurred in the case of the fowls just as in the case of the pigs, but it only took one generation.

Stockard points out the large percentage of infertile eggs may not have been an elimination of weaker cells, but a very early pre-natal mortality which would very naturally be mistaken for infertility. Such an early mortality was actually shown with the pigs. However it may be, both Pearl's and Stockard's results are almost without doubt due to the tendency of alcohol to injure the germ plasm.

One is rather inclined to ask, if the weaker ones are eliminated in this selection, are not the stronger ones at the same time weakened? And in the case of man the application is considerably modified, for it will not follow that the physically weaker ones are also the mentally less capable.

Cole and Davis have confirmed these by double matings with rabbits, and when a female was mated at almost the same time with normal and alcoholic males, it was found the sperms of the alcoholic male usually failed to fertilise the ova, probably owing to influence on the vitality of the sperms.

I would like you to criticise this work yourselves. My criticisms are that the intoxication six days out of seven was very severe, and that in any case alcohol is entirely strange to the constitution of guinea-pigs and fowls, whereas man must have acquired some tolerance or habituation since he has used it for such a long time. And, of course, the pigs and fowls are much lower in the animal scale.

The immediate and remote effects of inhalation are also quite different from when it is taken via the alimentary canal, as in the case of man. This is shown by the fact that although in man heavy drinking undoubtedly shortens life these pigs and fowls actually made records in longevity. And if the alcohol was begun after the age of three months, in no case was there any injurious effect on the animal's welfare. Frequent macroscopic and microscopic examinations of tissues in no case showed any changes like the well recognised ones chronic alcoholism in man causes. Inhalation causes none of the metabolic catastrophies caused by heavy drinking. Alcohol via the mouth acts far longer, as it is absorbed by degrees; it disturbs digestion; it upsets metabolism generally, and *I believe this general derangement of metabolism does more harm to the germ-cells than any specific effect the alcohol itself may have.*

The incidence of cirrhosis of the liver is an indication of the upheaval caused by alcohol via the alimentary tract. I think I am right in saying that cirrhosis is not peculiar to chronic alcoholism. It is in fact due to a primary disorder of the mucous membrane of the gut, which is rendered less efficient in absorption and more prone to let in bacteria and toxins. No cirrhosis was noticed in the pigs or fowls.

In the case of man the evidence is less direct and less conclusive. To carry out a precise physiological experiment is impossible, and statistics hopelessly entangle hereditary effects with indirect factors of every kind.

Holmes says:—"Recently, expression of opinion from *more scientific students* is rather more guarded, and by some it is held that parental alcoholism has no appreciable influence. No critically minded and unbiassed person who has become well acquainted with modern views on the nature of hereditary transmission can read very much of the writings without feelings of grave doubt and suspicion in regard to the conclusiveness of most of the evidence that is brought forward."

Whether it can be shown definitely or not that there is a transmission of an acquired character in the strict sense of the term we can at any rate enquire whether alcohol has a deleterious effect on the offspring in any way, primary or secondary.

It is a fact which I do not think anyone disputes and which I shall mention in relation to Pearson's work, that the number of still-births and deaths in early infancy is higher in the case of children of alcoholic parents than of sober parents. But here the complexity of factors is very large again; it has been stated that to attempt to define the part played by parental alcoholism as a cause of infantile mortality is really to try to evaluate an ill-defined segment of a vicious circle. And I will combine the adverse circumstances likely to produce this higher mortality with the factors which are likely to affect the child of the drinker later on.

Alcohol may poison the germ-cells by direct action or indirectly from disordered function caused by it. There is possibility of influence on the fœtus during pregnancy. (Starling says that alcohol is found in all tissues and fluids of the body, e.g., lymph, C.S.F., urine, saliva, milk, in the same concentration as in the blood, and that it goes via the placenta to the fœtus and occurs there and in the amniotic fluid in the same concentration; but the authority he quotes says that there is no effect on the fœtus unless the female has already injured the placental tissue by earlier drinking. Cushny says alcohol affects neither the quantity nor the quality of the milk, but omits to say if he means acute or chronic alcohol.)

The weakened or premature fœtus of the alcoholic mother may stand the shock of birth less. The family of the drinker are placed under far severer conditions. They can best be imagined by all of you in the extreme cases. The money goes on drink and the mother neglects her children. She lies late in bed, leaving the children to go unwashed and unfed to school where, as was remarked by an elementary teacher a short while ago, they usually are so exhausted they drop asleep. Deaths from overlying are very frequent, with the significant weekly rise on Saturday and Sunday nights. Blows and injuries from parents are common. The mother is frequently unable to nurse the child herself; the obvious bad effect of this from general physiological considerations is confirmed by Bunge, who says that in some districts the mortality of infants under one year fed on cow's milk is six

times that of those fed at the breast. Holt places it as three times. Without going into details Bunge has also shown by investigations in Germany that in 78 per cent. of cases of paternal drinking the daughter is unable to suckle her children; this is usually inherited.

Here, however, we must beware of deciding too grossly, for indirect causes may again be present. The bad hygiene of the drinker's home, and the great concomitant of drink—syphilis—may play their part.

Again, in all social questions it is very difficult, almost impossible, to differentiate between cause and effect. Take for example the influence of the father's work on his children; a man is a tailor or a cobbler because he is not physically capable of being a blacksmith or a docker, and if his children are below normal it is because of his inferior physique and not because of his employment. That is, the *inherent mental and physical characters of the parents may be productive of the environment.*

Or again, we may say if a woman goes out to work, her children suffer. That seems fairly clear. But is it? She probably goes out to work because her husband is not earning enough, and he is not earning enough because he is of inferior physique or intelligence, and his children would be inferior whether the mother went out to work or not. Actual statistics (in 1910) show that where the woman does not go out to work the average wage of her husband is 26s. 2d.; where the woman does go out it is 22s. 4d.

Thus we see that all the possible factors, direct and indirect, are hopelessly mixed up, and I am laying stress on this to show how broad-minded and careful one has to be.

As Karl Pearson again says:—"A social problem embraces the hardest of all problems. It is vital, not physical; it is biological, it is medical, it is statistical. It needs no less, but far more investigation for its solution than any academic physical or biological problem, yet every politician, every platform orator who would hesitate to express his opinion on a question in astronomical physics or cytology is ready with a decisive answer for each social question that arises."

Pearson's own work in conjunction with Miss Elderton is the only work which is at all a satisfactory investigation of the sum results of parental alcoholism on the children. The observations were made in Edinburgh and at some special schools in Manchester. The parents were carefully studied and their alcoholic habits specially noted. At Manchester they were classed as temperate or intemperate, but at Edinburgh as teetotallers, sober, suspect, drinks, or has bouts of drinking. The observations on the children were carried out by many skilled, careful and entirely unbiassed observers; a thing which cannot be said of other statistics where the reports have been from school-teachers or even from the parents themselves, if you ever heard of such a thing. The children were classed as regards height, weight, health, eye-sight and mental ability, and comparison made from these.

The outline of their results, which I have in full if anyone would like to examine them, is:—

1. There was a higher death-rate among the offspring of the alcoholic parents. This appears to be more marked when the mother drinks and not the father, and since it is sensibly higher where the mother has frequent bouts of drinking, it would appear to be due very considerably to accidents and gross carelessness, and possibly, in a minor degree, to a toxic effect.

Owing to the greater fertility of the alcoholics the nett families were the same.

2. The mean height and weight of the children of the alcoholics was slightly higher than that of children of sober, but as they were, on the whole, a little older, the correction for age gave a slight difference in favour of the sober.

3. The general health of the children of alcoholic parents appears slightly better than that of the children of the sober, perhaps because the more delicate died to a greater extent in infancy. There was actually more T.B. and epilepsy in the children of the sober.

4. Parental alcoholism was not a source of mental defect in the children.

5. Eyesight was slightly better in the case of the alcoholics. It may seem curious eyesight was investigated, but if alcohol produced degeneracy in the children it would be likely to appear as defective eyesight. It was thought the better vision might be due to the children of alcoholics spending more time in the streets. Investigation showed they did spend more time out of doors than the children of the sober, but an attempt to correlate time spent in the street with better eyesight was a complete failure. There was no correlation at all.

6. The intelligence was so nearly the same that any difference was insignificant.

Pearson and Elderton themselves say the results were exactly opposite to what one would reasonably expect, and even after much work had been done in the field it was expected it would be shown parental alcoholism had grave toxic and environmental effects on the offspring.

Their summing up was:—"No marked relation has been found between intelligence, physique or disease of the offspring and parental alcoholism. On the whole the balance turns as often in the favour of the alcoholics as the non-alcoholics. *It is need-*

less to say we do not attribute this to alcohol but to certain physical and possibly mental characteristics which appear to be associated with the tendency to alcohol. Other categories when investigated may give a different result, but we confess our experience as to the influence of environment has now been so considerable that we hardly believe a large correlation will occur."

The publication of these results brought down howls of criticism, but they were almost all entirely beside the point and were quite effectively dealt with by Pearson in a second memoir.

Possible criticisms are: only children were dealt with. But remember the rabid reformers say the bad effects date from conception.

Dr. Saleeby said the Edinburgh population consisted of slums in the North Canongate and was in no way representative of the people at large. The families, as a fact, included many good old families who had stayed there for old times' sake in spite of the degeneracy of the surroundings. And even if they were not representative it makes no difference whatever as long as the alcoholics and non-alcoholics were not two hereditarily differentiated classes. This has not been shown to be so, and the list of trades and wages prove the two are quite fairly and legitimately comparable.

As the studies of extreme alcoholism show, and as I will show again later, alcohol itself serves to distinguish biologically one class from another. But as mental effect is of such a graded nature, where does it cease to have this segregating effect? An occasional or moderate drinker is perhaps no more mentally peculiar than a teetotaller. But *as the use of alcohol increases it becomes more and more the mark of a defective stock.* In other words, there is just the possibility, as Pearson himself suggests, that the parents in Edinburgh and Manchester failed to develop the degree of alcoholism associated with mental defect. That is, they were of the bad stock that usually turns alcoholic but did not do so, and so were classed as sober, and this lowered the sober scale. But then, even if this was the case, would it not have been quite as misleading if they had been classed as alcoholic, for the alcohol would not have been the cause of their deficiency but a mere symptom?

Another objection is whether or not the parents began drinking before the birth of the offspring. It is a fair presumption that parents who drank after their children became of school age in most cases did so more or less before they were born. This of course is open to variation, and some may have drank before the children were born and become sober after, or the reverse. To the extent that such changes as these occur the correlation would not be revealed by the methods employed, and the presence of these fluctuations tends to weaken any correlation that might exist. And it is further weakened by the fact that the classes were not sharply defined; the teetotallers were very few and were grouped with the sober and small drinkers; the suspects were combined with the drinkers. On the other hand, no allowance was made for possible racial differences. There may have been many hard-drinking, short Celts whose children would have falsely depreciated the values of the drinkers.

Any faults such as these may be, lie, however, not in the methods used, but in the inherent difficulty of the subject.

All other statistics cited in answer to these I have already said are shown to be worthless. They do not say if the father or mother or both were drinkers, and in some American statistics there was no attempt to separate the children's own use of tobacco and alcohol which it was admitted was deplorably prevalent. All elementary precautions for reliable results were omitted.

Typical is the quotation of Bezzola's statistics by many writers. He tried to show that more imbeciles were conceived in Switzerland during the vintage than at any other time. Apart from any other value they might have, the rise which many writers who have clearly only quoted from hearsay talk about is only two or three per 700 births. There is not the slightest evidence, direct or indirect, to show the parents of the two or three extra imbeciles were ever acutely intoxicated in their lives or were at that or any time engaged in vintage operations. Also, do the people eat the grapes or drink the must? It would be an exact parallel if it was shown that there was a rise in imbecile births in Kent during September and beer was said to be the cause.

Sir Victor Horsley also compares the families of ten pairs of alcoholic and ten pairs of sober parents. The former had 8 idiots, 13 epileptics, 2 deaf-mutes, 5 dwarfs, 3 physical deformities, 12 died in infancy, 5 became drunkards affected with chorea and epilepsy, and only 9 were normal. All the sober parents had normal children. This is given in all due seriousness as a result of alcohol. It is obviously a case of rank, bad stock, and is so hopelessly out of proportion with the rest of the population that if it were so chronic alcoholism would simply weed itself out in one generation.

You will see how difficult any decided opinion is from a review of these facts.

In 1901 a report was presented to the Society of Inebriety (the very one which criticised Pearson so fiercely) by its own committee on Heredity of nine medical men. They said: "They are aware of and have devoted full consideration to the widespread belief that parental indulgence tends to render the offspring more innately prone than they otherwise

would have been to excessive indulgence, but they can only reiterate their conviction that the existing evidence on the subject does not at present warrant such a conclusion." Again: "In particular there is no evidence that characters acquired by the parents through indulgence in drink are inherited by the children. The committee are aware that it is possible that the mental and physical states produced in the parent do affect the child in some way through inheritance; again they admit as possible that indulgence may so damage the parental tissues that the germ is ill-nourished and the child is thus affected; yet again they admit as possible that the alcohol circulating in the parents' blood may directly affect the germ and in this manner produce degeneracy. *But these speculations have not been strongly supported by any evidence tendered to the Committee.*"

K. Pearson says this holds as well in 1910 as it did in 1901. And it still holds as well in 1923 as it did in 1910.

You will have observed I have frequently referred to extreme alcohol being a sign of a degenerate stock. The huge number of defectives from the ten pairs of drinking parents quoted above is an example. Most of the so-called damning evidence that is cited against alcohol when examined is found to be of this sort.

I have before quoted that from an examination of inebriate reformatories it was concluded that "Extreme alcohol is a symptom of a pathological inheritance."

Heron shows that "a large proportion begin to drink practically at the earliest age at which they can obtain access to alcohol, and the amount of mental defect among those who have been drinking for many years is only slightly greater than that among those who are at the beginning of their alcoholic career."

Pearson writes:—"In a paper shortly to be published it will be seen that the mental defect to be found associated with extreme alcoholism antedates the alcohol, and is the antecedent, not the consequent of it. Mental defect exists in about one per cent. of the population, whereas twenty to forty per cent. of parents according to locality and occupation drink. At the back of extreme alcoholism and sexual excess will be found invariably a want of will-power, of self-control; that is a mental defect."

E. A. Poe:—"During fits of alcoholic unconsciousness I drank—God knows how often or how much. As a matter of course my friends referred the insanity to the drink, rather than the drink to the insanity."

Stocker followed up his own cases of alcoholic delirium. He went into the patients' homes, got on friendly terms with the families and obtained information about their early life and symptoms of disordered mentality before the alcohol.

Out of 115 cases he obtained fairly complete data. Thirty-four had more or less regular fits, and in all but two these started before the patient used alcohol in excess. In the vast majority of the rest there was a history of nervous or mental derangement before alcohol, and in most cases neurotic taint in the parents or near relatives. Starling bears out this opinion: *the excess is simply the earliest symptom of failing control.*

Sir F. Mott says, in brief, exactly the same. When he was physician at Charing Cross he always associated mental disease, not with alcohol but with syphilis. He treated very large numbers of chronic alcoholics at Charing Cross, and he remarks they were mostly in work, i.e., to a casual or even skilled observer there were no marked mental changes. When he took up his asylum work he found that most of the mental defect was attributed to alcohol, but investigation showed that as before the greatest cause was syphillis; alcohol being, except in few cases, only a concomitant.

Drs. Branthwaite and Sullivan, both ardent temperance movers, have publicly stated that the cause and effect of alcohol in mental disease has been entirely ignored and that they believe alcohol is merely the herald, the first obvious sign of incipient mental disorder.

In other words, inebriety is *more* an *incident in the life* of the inebriate than the cause of his mental defect.

Many of the abnormal persons had parents who were drinkers. But if you inquire into *their* history the same question arises! Were they alcoholic because they were degenerate or degenerate because their parents drink? and so the question goes back generation after generation and probably the same conditions would be found in the stock as to-day. The re-appearance of alcohol in a family no more proves it is the result of liquor than the re-appearance of kleptomania is a result of parental thieving.

The question is, What started the first strain of neuropathic alcoholics? The origin of defective strains is of great importance in Eugenics. It presumably started from a relatively normal stock and we have proved alcohol and degeneracy go hand in hand. It is most likely the degeneracy gave rise to the alcoholism though it is possible, but not probable, that in some cases the alcohol was the cause of the first appearance of the degeneracy.

Man has used alcohol from time immemorial The possession of a vineyard was the earliest synonym for a settled home. Hebrew tradition ascribes the discovery of wine to Noah. Probably when man reached the agricultural period of his existence he first brought alcohol in to influence his future life.

Hardly any savage tribe exists to-day which does not use fermented liquor in some form. But persistent drunkenness is only a product of civilisation. The Egyptian pictures of 6,000 years ago show drunken revels. The Greeks described the Hereafter as an everlasting drunken orgy as a reward of virtue. Odin's paradise was continual wine.

Why is it this almost universal practice of making and drinking fermented liquors has existed for such years? It has been contended that it indicates an instinctive need for them and it has been suggested that they fulfil some purpose in the evolution of the race. This so-called natural craving for an agent which alters the relation of the ego to its environment cannot be denied, although it varies greatly in individuals and races.

These drinks could only be used for the following reasons:—1. Flavour. 2. Thirst. 3. Revivify and dispel mental depression.

It is not flavour, as without alcohol they would cease to attract; and if you knew of the fearful, burning concoctions made by some savage tribes, you would see they drink them in spite of, not because of the taste. Also, not even the finest cooking to-day could replace wine in a meal for any man who uses it, and a man who cannot get his usual alcoholic drink will use another one, whatever the flavour, in preference to any non-alcoholic one.

Thirst is also absurd. Water would do equally well, and strong spirits do not quench thirst. And as regards the final point, the people who fly to alcohol most are the vigorously healthy people, the savages; these most certainly do not need to be revivified and have their depression removed.

There is everywhere shown a disposition to use something of this sort, opium, alcohol, or tobacco, and it is a necessary conclusion man has an inborn liking for intoxicants. The Edinburgh and Manchester statistics seem to show the people who drink are those possessed of a certain vitality and vigour. They require something to help them "let off steam."

My own explanation is that alcohol is used as a kind of "pseudo-hormone." Just as a hormone is sent into the blood to bring about a certain condition which is to be desired so man uses alcohol, in moderation, for he knows it will bring him what he desires, exuberant well-being, a peace of mind, freedom from worries, a friendly nature. Alcohol, I am now referring strictly to moderation, serves a very useful, and to my mind irreplaceable purpose in man. As Starling says, "wine with the chief meal at the end of the day's work is one of the amenities of civilisation, like the clean cloth, flowers on the table, a warm room, and a congenial companion." If a man comes to dinner with his head still busy with his work he will begin a vicious circle which will undermine his health, but which alcohol will break even before it is begun. Pavlov, in his work on the digestive glands, expresses the same opinion. Innumerable people are made happier and therefore healthier by its use.

Races which have been excluded by religion or circumstances from all use of alcohol are at the present time no more moral or efficient than those who have used it. Unless there is something biologically or socially valuable, or at least, not harmful in it it seems impossible to account for its persistence in evolutionary progress. Apart from elimination of anything but its excessive use reformers have always been bitterly opposed. When alcohol is taken in moderation the money spent on it must be compared with that spent by other sections of society on cinemas, theatres, music-halls and their accompanying bad hygiene. Do these rabid prohibitionists never seek to forget themselves by reading trashy cheap literature or watching prize fights or such things? "The best work of the community in all branches of life is carried out almost entirely by men who use alcohol habitually, but moderately."

It has been proved by some splendid statistics by Pearl, which I defy anyone to contradict, that the moderate drinker in no way differs in expectation of life from the teetotaler, and in fact may be far better off. It is only with repeated excess and gluttonous drinking that danger to life and to happiness of family and community comes in. Alcohol is essentially a brain and nerve poison and it is mainly due to this that it has proved so disastrous an agent to the human race.

Men drink to excess for the following reasons:—

1. Fashion, a perverted herd instinct. A century ago it was the thing to be a sot, but fashion decreed it should stop and it is now not the thing to drink to excess. This has spread to the middle-classes and is making its way down to the lower classes where soon we hope it will have become a thing of contempt.

2. Ignorance. Men about to do heavy work will go and drink a pint or two of beer believing it is going to help them. In work in the slums of St. Pancras it has been found working mothers are very anxious that their children should be born healthy and strong, that the large prematurity, still-births and infantile mortality is chiefly due to want of knowledge. Many women, even women who ought to know better, will drink alcohol while nursing, believing their milk will be better for it.

3. *Economic Conditions.* If men and women in virtue of every-day surroundings are forced to lead the life of beasts it is no wonder they drink to excess to forget. This "misery drinking" is begun to help forget, the result is only to increase the things which would be forgotten.

Both these last two things can be cured. Decent housing and sanitation, humane treatment, recreation and education would wipe all these causes right away. Prohibition simply throws a rag over them all. It is the soporific which will hide the warning symptom.

The last group is not one which can be treated. It consists of those with an inherent nervous defect, the ones who take alcohol because they cannot help it. This class by its very excess tends to destroy itself; alcohol is the selecting agent. The total removal of all alcohol by law will not mean the removal of the defects seen, it will mean their multiplication.

How far alcohol has been a selective agent in the ascent of man I will leave open to discussion. Speculation is almost all one can indulge in.

Sir F. Mott says "it may be presumed individuals who are able to drink continuously to such an extent as to die eventually of delirium tremens were possessed of an inborn stable mental organisation. and without any precise data to prove it I am of the opinion that they would transmit to progeny the stable mental organisation they inherited rather than the weakened will-power acquired."

Lastly, Alcohol and Venereal Disease. The two apparently go hand in hand, but Professor Starling postulates that there is a degree of antagonism between alcohol and sexual indulgence. He quotes from the V.D. Clinics of Two Military Hospitals and shows that 75 per cent. of the patients were infected undoubtedly *quite apart from alcohol,* and suggests that each tend to allay restlessness and irritability and to produce a condition of content and self-satisfaction, and if a man does not make use of one he will use the other.

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Gravediggers.

Undoubtedly old Will Shakespeare has given us in "Hamlet" two of the finest examples of this craft. In Tree's "Hamlet" Lionel Brough did the part of the first grave-digger to a turn, and I am rather proud that my good brother Charles succeeded him at the Haymarket Theatre, and gave Elizabethan humour to Queen Victoria, in acknowledgement of which that good Queen most graciously presented him with a solid gold cigarette case. Hence my interest in grave-diggers.

About the time my brother was tickling the royal ear at Windsor, I discovered a fellow student at Guy's to be the son of one who followed this honourable calling. He was an amazingly able fellow, who had scholarshipped and scholarshipped, and then walked off with a lot of our medals and prizes. Though adept at our studies he still preserved a hankering after the paternal craft, and, if still living, I have no doubt could still discourse on the proper perpendiculars and levels of the churchyard.

At this time also I met my first grave-digger in Phillip, when clerking to the late Dr. Pye Smith. The man was suffering from *Pityriasis rubra,* and the nurse used to sweep up daily a dust-pan of shiny scales.

Dr. P.S.: What is the matter with this patient?

Clerk: Pityriasis.

Dr. P.S.: Pityriasis is a symptom, not a disease. What is the derivation of the word?

Clerk: I don't know Greek, Sir.

Dr. P.S.: Mr. So-and-So, you are from Oxford, can you help us?

Oxford Man: From the Greek *κίγυριασις* from *κίγυρσυ*, meaning *bran.*

Dr. P.S.: Quite right! Quite right! (*Turning to clerk.*) An allusion to the branny scales; if when you brush your hair you dislodge branny scales, you therefore have pityriasis, what the dermatologists call *Pityriasis capitis.* There is also Pityriasis versicolor, and Pityriasis rosea. (*Turning to grave-digger.*) This patient has evidently Pityriasis rubra. Now why has he got it?

Clerk: From cold and damp; he is a grave-digger.

Dr. P.S.: Do all grave-diggers get Pityriasis rubra?

(*We were taught in Guy's in those days.*)

My next and last experience of a grave-digger was at a funeral. I had lost a charming and beloved patient in the country and was waiting in the cemetery for the funeral procession; as was my wont I was well before time, and to pass the interval fell into conversation with a hirsute sand-covered man bearing the implements of his calling. "In no place in Surrey, Sir," said he, "do they lay so snug.

Look ye down—all dry sand. The best place for them in all Surrey, though perhaps I ses it as shouldn't, having worked 'ere all my life, man and boy. They never goes foul nor rotten 'ere, and I can prove that same. Some years ago they took a corse up by orders of the perleece, suspecting as 'ow there 'ad been foul play. He came out sweet as a nut, I seed 'im myself. The doctor as 'ad the doing of 'im said he had turned to meerchum, the same as wot the baccy pipes is made of, or leastways if he 'adn't turned 'e was turning."

Then up came the funeral.

A.P.A.

A Few Tales by an Old Guy's Man.

About November, 1864, I remember Dr. Gull bringing two clinical thermometers for his clerks, the first to come to the Hospital—long, bent things like incubator thermometers. We never knew when he would come, but after going round with some other physician, we used to meet him coming in with the visitors, and so get a second round. He had always a class of thirty or forty students and others. The only time to really enjoy him was Sunday morning from 10 to 11 a.m., after which he suggested our going to chapel.

There were many stories about him. It was about the time that typhoid fever was being treated without medicine and Dr. Gull was congratulating a patient on his recovery, when the man turned on him and said: "Yes, but no thanks to you. I've not had a drop of physic since I came into the House."

He was a shining light on typhoid fever as on most other diseases. One Saturday he gave a clinical lecture on a case of scarlet fever and finished up by saying, "Now we will go and see the poor girl on the post-mortem table, one of the most typical cases of typhoid fever ever seen." I forget who was his clerk, but Dr. Gull did not forget to dress him down. I should think he never forgot the "Rose Red Rash of Typhoid Fever."

One day he was referring to the death of the Prince Consort, and he told us that during breakfast his wife took up "The Times" and read out that the Prince Consort was suffering from a feverish catarrh and "I (Dr. G.) replied it is typhoid fever: he will be dead in a week, and he was dead in a week, gentlemen." Of course he attended and almost nursed Albert Edward, Prince of Wales, through his attack of typhoid.

Another yarn I remember very well was as follows: "I was at dinner last night when my butler came in and said that there was an urgent message for me to go and see the wife of one of the civic dignitaries of this great metropolis. I replied that I was very sorry but I never went out after dinner and advised them to send for Dr. Habershon, and I would meet him next day. So this morning I met him and Sir Thomas Watson in consultation, and after we had completed our examination, Watson said, 'Well, Gull, what do you think of it,' and I replied, 'I think she is drunk,' and Watson said, 'So do I,' and the others there agreed. Then Watson said, 'Gull, you are the biggest humbug of the party, will you communicate our opinion to the relatives,' so I took the husband aside and spoke as follows: 'After a most searching examination of this very interesting case, we have arrived at the unanimous conclusion that she is suffering from acute alcoholic toxæmia affecting the supreme central ganglia of the cerebro-spinal and sympathetic nervous systems.'"

Dr. Gull always advised the City as the place to make money; he did not migrate West until later on.

Almost the last time I went round the wards with him he said, "I was so tired this morning that I took up my pen to write my resignation to the Treasurer, but I threw it down and exclaimed, 'No, though I give up the world, I'll stick to Guy's.'"

Three weeks after we were disgusted to hear that he had really resigned.

A great teacher.

One or two personal notes and I will conclude. We all know what hypodermic medication has arrived at; it seems almost incredible that to the best of my knowledge I gave the first morphia injection to a patient of Dr. Barlow in Stephen Ward sometime during 1865. My first diagnosis was made when I was clerk to Dr. Wilks: a woman with very severe rheumatic fever and a pericardial rub you could hear across the ward. It was only a small class, and as each one listened Dr. W. asked "Did you hear it" and each one answered "Yes, sir." I happened to come last and could not hear anything, so replied "No, sir." Then Dr. W. listened, but the rub had vanished.

I had somewhat a facer when H.S., a boy, was admitted to Dorcas for scald of the pubes; no history. In the course of three or four days he died, and in due course I attended the inquest and gave evidence in accordance with the diagnosis. The mother was sworn immediately after and stated that the boy had never been scalded, but that it began as a pimple and spread. She appeared truthful, so I got out of it as best I could.

It extended about a hand's breadth above the pubes, and was accepted by everybody who saw it as a scald. I compared notes with the Sister

after and we both thought that it had extended slightly. I never made anything more of it. Also when H.S. I had the honour of entertaining the Lord Mayor of London and his chief clerk. We had a *cause celebre* in from the City and they came to take her depositions during visiting hours on Sunday afternoon, and they would neither allow me to clear out the visitors nor to go to my room to wait. I blessed them a little for keeping me hanging about for an hour or more.

Reviews.

A Manual of Psychotherapy. Yellowlees. 10s. 6d. net.

We are constantly being reminded that we should "treat the patient as well as the disease." And in order properly to carry out this excellent advice it would appear that some knowledge of Psychology and of Psychotherapy is essential to all of us. One has long felt the need of a small book on this subject, and one feels that Dr. Yellowlees has supplied this want in his "Manual of Psychotherapy."

This book, which is written for the general practitioner and for the student, assumes no special knowledge other than a general knowledge of medicine. The possibility, however, of the cause and cure of various disorders being mental is assumed, and the book is devoted to indicating the mental lines along which the causes and cures proceed.

The book is divided into three sections. The first deals with the principles of psychotherapy. The reader is made familiar with the mental mechanisms and the lines along which the mind works from the point of view of psychopathology.

In the second section methods are discussed. Hypnotism and suggestion are clearly explained and the indications for each are discussed. The Psychoanalytical Theory is dealt with fairly and at some length "in order that one may properly appreciate its use and value as a method of treating the symptoms, the origins of which it explains."

The last section deals with the Scope of Psychotherapy. A classification of psychological disturbances is given and the diagnosis of the neuroses and psychoneuroses is discussed, together with their treatment. Then follow two very good chapters on Psychotherapy in General Practice. These are essentially practical and one gains an excellent conception of the scope of this branch of medicine in general practice.

Papers by Guy's Men.

H. C. Cameron, M.D., F.R.C.P. Intracranial Birth Injuries.—*Lancet*, 1923, ii., p. 1292.

Rugby Football.

GUY'S v. CARDIFF.

To Cardiff our 1st XV. journeyed on December 8th, but not to return victorious. It is not often we beat Cardiff on their own pitch; one would like this notorious Welsh team to come to us at Honor Oak Park. They come to other London grounds. Why not to us?

The side that made the journey was not fully representative. One missed J. G. Van Schalkwijk, B. G. Scholefield and Graham-Davies. The former's absence is always noticeable, not only from the point of view of his play, but from the fact that the matches he has missed do not yet amount to the number of fingers on the hand. This magnificent keenness is also apparent among other members of his team and a word in appreciation will duly appear.

A very sterling forward named J. Grant appeared to dominate the forward play of the Welshmen, and he it was who within a very few minutes of the kick-off gained a try, which was goaled. Our reply came via Fouraker, Finnemore and Meissner. Close by the corner was the touch, and the kick of E. E. Neser did not convert. T. Johnson, of Cardiff, kicked a penalty goal. After the interval the ubiquitous J. Grant again scored. The Guy's forwards were pretty good in the loose and came up frequently against B. C. Male, the International Welsh full back. The next item was a dropped goal by Danny Davies. There were three Davies playing, so one must be explicit. Neser now helped us by placing a goal from a penalty given to us, Johnson doing the same for Cardiff. The game finally resulted in Cardiff winning with 1 goal, 1 dropped goal, 2 penalty goals and 1 try (18 points) to Guy's 1 penalty goal and 1 try (6 points). If one analyses the score there wasn't such a big difference after all. The referee was Mr. T. H. Leidtke, of Pontycymner. One thinks and hopes the spelling of the referee's name and that of his club is correct.

Guy's Team.—W. Badenhorst, W. Orsmond, R. D. Spence, G. Fellowes-Smith, J. W. Finnemore, W. Meissnen, C. L. Steyn, E. E. Neser, N. M. Holloway, E. H. Fouraker, G. G. T. Tregarthen, J. W. Schabort, F. F. Brayfield, E. W. Hutchinson, and G. G. Cameron.

GUY'S v. ABERAVON.

Going down to Wales for the second week in succession, Guy's only lost by the place kick being unsuccessful. We couldn't muster quite a full side, but all the more credit to those who went and who were so nearly successful. Aberavon have had a very good season, only losing so far about a

couple of matches. We cannot point to so successful a time, but we can anyhow comfort ourselves with the fact that many matches played have been very near things and all have been pretty hot stuff

It was a very good game at Aberavon on Saturday, December 15th. For the first portion of the play Aberavon had the best of it and it was about 15 minutes from the commencement that our opponents got their try and promptly converted it. After this we got going better, but nothing came our way until after change of ends when Fouraker scored for us, but as no conversion followed we had to call ourselves defeated, but by no means disgraced. Result—Aberavon 1 goal (5 points), Guy's 1 try (3 points).

Guy's Team.—W. Badenhorst, J. W. Finnemore, C. L. Steyn, P. D. B. Spence, G. Fellowes-Smith, W. Meissner, J. G. Van Schalkwijk, E. E. Neser, E. H. Fouraker, N. M. Holloway, G. G. Cameron. J. W. Schabort, G. G. T. Tregarthen, H. de Wet Vorster, E. W. Hutchinson.

Fencing.

GUY'S v. OXFORD UNIVERSITY.

On Wednesday, December 5th.

For this, the first match of the season, the team was without the valuable assistance of Blacker, and our antagonists had a record of seven complete, sometimes overwhelming, victories and no defeats. These two facts did not have the sobering effect on the team that might have been expected and, catching the train at Paddington after traversing town in London's oldest taxi, was taken as an omen of brilliant good fortune. The Captain was so elated that he got all worked up and made a vow that should we win we would have our photographs taken and hung up in the Gym. Posterity is saved from the results of this high-spirited but terrible vow. Had the buttons been off the foils there would have been nothing to photograph. In speed, skill and general fitness Oxford were our masters and, though we were rather better than the score would suggest, we need to spend long months of practice and vast stores of enthusiasm before the Oxford doublets suffer any very serious hurt from the hospital swords. The individual results were :—

	Foil.		Epee.	
	Wins.	Losses.	Wins.	Losses.
W. H. Foy	2	3	2	3
L. G. Housden	1	4	3	2
C. H. Johnstone	1	4	0	5
T. Sylvester	1	4	2	2*
W. Mayne	0	5	2	3
	5	20	9	15

*1 coup double.

Notices.

We have been asked to bring to the notice of our readers a Ball, promoted by the League of Mercy, to be held at the Carlton Hotel, Pall Mall, W., on Wednesday, 16th January, 1924. The League exists for the support of Hospitals and as such is deserving of the most whole-hearted support. H.R.H. the Prince of Wales will be present.

Tickets 25s. each, or six tickets for six guineas, can be obtained from The Secretary, The League of Mercy, 20, Cockspur Street, W., and the Manager, Carlton Hotel, Pall Mall, W.

Clinical Lectures.

On and after Thursday, January 3rd, Clinical Lectures will be given on Mondays and Thursdays, at 1 p.m. instead of on Mondays and Wednesdays, at 1.30 p.m., as at present.

T. B. JOHNSTON, *Dean.*

December, 1923.

Pass List.

L.D.S.

Final Examination.

NOVEMBER, 1923.

Parts I. and II.

L. Hopson Jones.

Change of Address.

Ray Edridge, 29, Gay St., Bath.

Eric H. L. Sander, L.D.S., Oakington Manor Drive, Wembley Hill. ('Phone: Wembley 687.)

W. C. Cunningham Park, Staffa, Selsey, Sussex.

Charles J. R. Tyon, L.G., "Parkstone," Elm Grove, Thorpe Bay, Sussex.

Harold Long, Dene End, Stormount Rd., Highgate, N.6. ('Phone: Hornsey 1847.)

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE *can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to the Editor, "Guy's Hospital Gazette," Guy's Hospital, London, S.E.*

Births.

MULLINS.—To the wife of H. R. Mullins, M.R.C.S., L.R.C.P., 134, Fraser Street, Kenilworth, Johannesburg, South Africa, on November 19th, 1923, a son.

VILJOEN.—On November 8th, 1923, at Bredasdorp, South Africa, the wife of W. J. Rousseau Viljoen, L.D.S., R.C.S. Eng., a daughter.

ED.—C. H. C. T.

GUY'S HOSPITAL MEDICAL SCHOOL THE WILLS LIBRARY